THE

# PRINCESS OF WALES
# SARASVATI BHAVANA STUDIES

EDITED BY

**GOPĪ NĀTHA KAVIRĀJA.**

VOL. IV

STUDIES IN HINDU LAW

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## VOL. IV

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# I.—STUDIES IN HINDU LAW.

## III

## Judicial Procedure

By Gangānātha Jhā.

*References*—

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## SECTION I.

### (*A*) *Court.*

Section 1. The Court is that where the Brāhmaṇa-Judge, appointed by the King, presides, assisted by three Brāhmaṇa-Assessors—(Manu 8. 11).

Notes.

Details about the qualifications of the 'Judge' and the 'Assessors' will follow later on.

2. The Court-house shall be built within the Fort ; it shall stand by itself, to the East of the Palace, facing the East ; it shall be furnished with seats, garlands and incense, seeds and jewels, images of the gods of writing ; food and water. (Bṛhaspati, in Parāsharamādhava P. 17).

Notes.

This house is called 'Court of Justice' because it is here that cases are investigated and justice administered.

3. The King shall enter the Court in the morning, after having performed his daily duties, and honoured his Preceptor, Astrologers, Physicians, Gods, Brāhmaṇas and Priests, with flowers and ornaments.

4. The exact time for holding the Court is between 7-30 a. m. to 12 noon.

5. No Court shall be held on the 8th, 14th, 15th, 23rd and 30th days of the month.

6. Courts are of four kinds : (1) The Chief or Central Court (described above), (2) the Moot Court, held in circuit, in different villages, (3) Court presided over by the Judge and (4) the Court presided over by the King. (Parāsharamādhava, P. 18).

7. Apart from these Royal Courts, there are also what may be called Communistic Courts: (1) disputes among foresters being settled by foresters, (2) those among merchants by merchants, (3) those among soldiers by soldiers, (4) those among villagers and foresters by inhabitants of both places.—(Bhṛgu).

8. The following are the ten constituents of the Court:—
(1) King, (2) Judge, (3) Assessors, (4) Smṛti or Proclaimer, (5) Computer, (6) Writer, (7) Gold, (8) Fire, (9) Water, and (10) Bailiff.

9. In the Court, the King shall sit facing the East, the Assessors shall face the North, the Computer shall face the West & the Writer towards the South.

Notes.

N.
Writer

W. King Computer E. } Plan of the Court in Session.

Assessors
S.

## I—KING.

10. The King is the President and Controller.—(Bṛhaspati).

11. Desirous of investigating cases, the King shall enter the Court, with a dignified demeanour, along with Brāhmaṇas and Councillors, versed in counsel.—(Manu, 8. 1).

Notes.

On this Medhātithi remarks that the Brāhmaṇas invited to the Court should be such as are 'versed in counsel'.

In regard to the duties of the King, Medhātithi remarks that he himself should try all criminal cases involving the inflicting of penalties. As regards cases in general, he mentions the following authorities in the descending order of importance—(1) The King, (2) the persons appointed by the King [*i.e.* the Judge with the three

Assessors], (3) Tribes, (4) Guilds and Families,— quoting Nārada (1.8.). [See above]. He goes on to make the distinction that "The King's business extends up to the inflicting of punishments, while that of the others only up to the pronouncing of the judgment". To the four just mentioned, Bhṛgu, quoted by Parāsharamādhava p. 19, adds 'villagers' and 'citizens'.

### II—PRĀḌVIVĀKA–JUDGE.

12. If, under pressure of more important business, the King is unable to try the suits himself, he shall appoint a Judge to try them, with the help of the Assessors.—They should be persons fully conversant with the Law.

(Yājñavalkya 2.3).

Notes

According to others, even when he is trying the suits himself, the King shall have the Judge there to advise him. In this case, however, the functions of the Judge are purely advisory.

13. The Judge is the person who is to *put questions* (*pṛchchhati*) to the parties and the witnesses *in a dispute* [and as such is called '*prāḍ*'], and who delivers the introductory address and discusses the issues involved [and as such is called '*vivāka*'].—Hence he is called the '*Prāḍvivāka*'. (Nārada).

14. The Judge should be conversant with the legal procedure bearing upon all the eighteen Heads of Dispute, well-versed in Logic and other sciences, learned in the Veda and the Smṛtis.—(Nārada).

Notes.

This is quoted by Medhātithi under Manu (8.9.), where the appointing of the Judge is laid down. Medhātithi adds that the Judge should know the Science of Morality also, which shall save him from undue influences.

15. While the suit is pending, the Judge shall hold no private conversation with the parties; if he does so, he shall be fined.—(Kātyāyana).

## III ASSESSORS.

16. The number of Assessors shall be 3, 5 or 7—(Bṛhaspati)

Note.

Manu (8-10) mentions only 3, which according to Medhātithi is the minimum.

17. No one shall be appointed Assessor who is not conversant with the customs of the place, who is an unbeliever, or devoid of learning, or avaricious.

18. The Assessors are to investigate the cases. (Bṛhaspati).

19. Assessors are to be appointed by the King; no one can sit in the Court as a matter of right. They should be 'endowed with learning, both religious and secular',—the former consisting in the knowledge of the Veda and its subsidiaries,—'well versed in Law, and truthful' (i. e. absolutely free from love and hatred, and as such capable of offering unprejudiced advice to the King).—(Manu 8.10 Yājña 2.2).

20. These Assessors should be Brāhmaṇas; but in the event of no Brahmaṇas with the requisite qualifications being available, the King may appoint Kṣattriyas; and in the absence of these latter, Vaishyas may be appointed. But they should all possess the above-mentioned qualifications.

21. The law may be propounded to the King by the Brāhmaṇa,—never by the Shūdra. (Manu 8.20).

Notes.

This, according to Medhātithi, means that 'even though a Shūdra might learn bits of Law and become a councillor or an officer for inflicting punishments, he shall not pronounce any opinion on the merits of cases investigated in the Court.'—According to some people, if no Brāhmaṇas are available, Kṣattriyas or Vaishyas may be appointed,—but never a Shūdra.

The Brāhmaṇa assessors come in only as *advisers*, not as actual administrators of justice—says Vishvarūpa (on Yājña. 1). The administrator is the King himself ; or in his absence, the Judge (see below).

22. If the Assessors allow themselves to be swayed by covetousness or by passions or by fear or similar influences, and thereby do what is against law, each of them shall be fined—the amount of the fine to be double the amount involved in the suit.—(Yājña. 2.4).

Notes.

This penalty of fine has been prescribed only in connection with suits regarding property ; in the matter of suits relating to assault and other causes, there are other penalties ; for instance, Viṣṇu lays down 'confiscation of the entire property' as a punishment for taking bribe.—If the assessor fails to understand the issues, he should not say anything ; if he does pronounce any opinion without duly understanding the case, he should be fined double the amount involved.

According to Vishvarūpa, for the above delinquency, the King or his representative, the Judge, is to be fined double the amount of fine inflicted on the Assessors.

23. The Assessors shall not converse, in private, with the parties ; if they do, they shall be fined.—(Kātyāyana).

### IV—SMṚTI—Proclaimer, Herald.

24. The Smṛti or Herald shall proclaim the judgment of the Court, and announce its decrees and penalties.—(Bṛhaspati)

### V—COMPUTER.

25. The Computer is to compute the exact amount of the claims.—(Bṛhaspati).

26. He should be well-versed in Grammar, Lexicography and Accountancy, honest and conversant with several scripts (Bṛhaspati quoted by Mādhava p. 23) ;—he should know Mathematics, Astronomy and Astrology.

### VI—WRITER.

27. The Writer shall write down the judgments delivered (Bṛhaspati); he should write legibly, should know Grammar, be truthful and of even-temper.

### VII-VIII—FIRE AND GOLD.

28. Fire and gold shall be kept in Court for the purpose of ordeals.

### IX—WATER.

29. Water shall be kept in Court for refreshment.

### X—BAILIFF—SĀDHYAPĀLA.

30. The Bailiff should be appointed by the King ; he should be a Shūdra ; he is to be subordinate to the Assessors.—(Vyāsa).

31. The Bailiff is to summon and watch the Plaintiff, the Defendant and the witnesses.—(Bṛhaspati).

### XI—PARIṢAD—Assembly.

32. The King shall also convene an Assembly consisting of merchants of high families, of good character, advanced in age and wealthy ;—they are to be present for watching the proceedings.—(Kātyāyana).

### (B) WHAT IS 'VYAVAHĀRA'—'SUIT'—'CASE' ?

33. When a man wrongly harassed by another, prefers a complaint to the King or to the Judge, this is the 'institution of the suit.'—(Yājña. 2.5).

## Notes.

The institution of a suit consists in the asserting of one's claim as against another person ; e. g. when one man asserts 'this is my holding,' while another says 'it is mine'. It consists in the instituting of the entire set of proceedings consisting in the Claim (Plaint), the Answer (Rejoinder), the Framing of Issues, Arguments, Investigation and Judgment. (Mitākṣarā, P. 227).

According to the *Aparārka* (P. 595) the 'suit' to be investigated by the King should be regarded as consisting only of the Claim, Answer, Framing of Issues and Arguments ;—the other factor of Judgment is what, consisting of the action of the Court itself, cannot be regarded as a subject of investigation. It concludes that the action of the two parties alone is to be understood as the 'suit'. But it adds that as the Judgment also is something that has to be duly *examined* before pronouncement, there can be no objection to regarding that also as a constituent factor of the Suit itself.

The term 'vyavahāra' (case) denotes, both by convention and etymology, the dispute between a plaintiff and a defendant, ending in a definite decision. The conventional connotation of the term has been thus explained by Kātyāyana :

When, on the decline of righteousness, there arises, between two parties, a dispute for the due ascertainment of their claims over a certain property,—such dispute is called *vyavahāra*, case.

In fact there would be no cases if all men were righteous. Bṛhaspati goes a step further and declares that cases always arise from either Hate or Avarice.

The etymological meaning of the word '*vyavahāra*' has been explained by Kātyāyana : 'Vi' is various, 'ava' is doubt. and 'hāra' is setting aside ; so that, '*vyavahāra*' consists in the *setting aside of various doubts.* (Parāsharamādhava—Vyavahāra Pp. 7-9).

Medhātithi on Manu (8.1).—The name '*vyavahāra*, is given to that action of the Plaintiff and the Defendant which they have recourse to for the purpose of reclaiming their rights ; or it may stand for the recovery of debts and such other matters themselves.

34. The Claim is of two kinds—(a) resting on suspicion and (b) resting on facts ; it is said to rest on suspicion when the defendant is a person known to associate with bad characters; and it is said to rest on fact, when the stolen property is actually produced.—Claim resting on facts is again of two kinds—(1) *negative*,—when the plaintiff asserts 'this man borrowed gold from me, which he is not repaying', and (2) *affirmative*,—when the charge is in the form 'he is taking wrongful possession of my lands.' The more detailed division is under the Eighteen *Heads of Dispute*—Recovery of Debt, Deposits, Concerns among Partners, Abstraction of Gifts, Breach of Promised Obedience, Non-payment of Wages, Sale without Ownership, Non-delivery of Commodity Sold, Rescission of Sale, Breach of Order, Boundary-disputes, 'Duties of Man and Wife, Inheritance, Violence, Abuse, Assault, Gambling and Miscellaneous Disputes.—There are again 108 subdivisions of these (Vide Nārada I.21).—[Mitākṣara, P. 227].

35. Neither the King himself, nor any servant of his shall promote a suit.—(Manu 8.43).

Notes.

This has been explained by Medhātithi to mean that the King shall not cause a suit to be instituted. He cites another explanation, according to which 'even though the King may be in a position to get at the offender directly, he himself shall not move in the matter until the offender has been brought before him by the person against whom the offence has been committed, in a regular suit ; because it is only after the defendant has been defeated in the regular suit that it is time for the King to inflict the legal punishment.' But this applies only to civil suits regarding debts and such matters; against thieves and criminals the King shall proceed on his own initiative There shall be no trial of a suit except when a complaint is received. (Aparārka 605).

36. The King shall not suppress a suit that has been brought up.—(Manu 8.43).

37. The following offences are 'Cognisable' by the King himself, on his own initiative : Highway robbery, interference with collection of revenue, trespassing over ramparts of the fort, destruction of drinking-fountains, arson, filling up of protective ditches, betraying of state-secrets, unauthorised entrance into the King's harem, sleeping apartments, treasury and kitchen, dressing more richly than the King and such other personal affront to the King (Pitāmaha) ;—Disobedience of the King's orders, killing a woman, adultery, theft, unspeakable abuse, abortion, abduction of girls, murder of Brāhmaṇa, cowkilling, destroying of standing crops.–(Saṃvarta).

Notes.

As the King may not himself be able to detect such crimes he is to employ (a) Detectives and (b) Spies.

The 'Detective' (*Stobhaka*) is one who, on payment of fees, traces crimes and reports them to the King, and the 'Spy' (*Sūchaka*) is one who is appointed by the King to find out the delinquencies of other people—(Kātyāyana).

## (C) PROCEDURE.

### Preliminary Rules.

38. The claim shall be preferred by the Plaintiff of his own accord, and not at the instigation of the King or his officers.—(Manu 8·53).

39. After the Plaintiff has preferred his claim, he shall be questioned—by the Judge or the Bailiff (Bṛhaspati) regarding the details of his complaint—who has harmed you ?—in what manner ?—for what reason ?—(Kātyāyana).

40. If, on being questioned, the man remains silent, the case shall not be proceeded with.—(Mādhava p. 42).

41. If the man enter the court, accompanied by friends, and answer in an arrogant or disrespectful manner,—he shall be fined—( Ushanas ).

42. As a rule, the plaintiff shall appear in person. (a) But in some cases only, authorised representatives of the parties are allowed to appear. (Kātyāyana). (b) But the father, mother, or friend or relative may prefer the claim on behalf of the plaintiff, even without due authorisation. (Pitāmaha). (c) Persons other than these, coming to speak for the plaintiff, shall be fined. (Nārada).

43. If the plaintiff is too shy to state his case verbally, he should be given some time to recover himself—the time allowed being 3 to 7 days.—(Kātyāyana in Parāsharamādhava p. 51).

44. The King or Judge shall consult the members of the Court and then issue the summons for the defendant, —handing over the summons either to the plaintiff or to one of his own officers.

45. He shall not summon one who is either too ill to attend, or a minor, or too old, or in difficulties, or engaged in religious acts, or unable to attend without detriment to a more important business, or in mourning, or engaged in state-business, or busy with festivals, or drunk, or suffering from epilepsy, or insane, or in trouble.

46. These latter also may be brought to the Court in due time on conveyances provided by the Court, if the nature of the case requires their presence.

47. But if the defendant's disabilities are such as will continue for a long time, then he shall depute some one to represent himself ;—and in cases against a young woman of respectability, or one in confinement, or of the Brāhmaṇa caste, the King shall summon her relatives ; but this conces-

sion does not extend to women who are not respectable.—(Aparārka).

48. The person summoned must attend in person to answer the charge ; (a) but the 'incapable' may be represented by his father, or son or brother or a qualified servant. (b) This concession is extended to such women as are either young, or in confinement, or belong to respectable families, or to the Brāhmaṇa caste ; but not to such women as are either their own mistresses, or independent or courtesans or outcastes—(Kātyāyana).—This same exclusion from concession applies also to the wives of shepherds, wine-sellors and so forth. (Aparārka).

49. When the defendant, being summoned, refuses to proceed to the Court, he shall be put under 'restraint' by the plaintiff.

Notes.

*I. e.*, he should be prevented from taking food or doing such other necessary things ; but an exception is to be made in favour of persons who may be physically unfit.

50. The methods of 'restraint' are as follows :—(1) The man may not be allowed to remain in the house, (or he may be prevented from going out of a prescribed limit), (2) he may be prevented from taking any food for a day or so, (3) he may be prevented from going on a contemplated journey, and (4) he may be prevented from carrying on business or performing necessary duties.—(Nārada).

51. One who transgresses the 'restraint' put upon him, shall be fined. So also if he disobeys the summons through arrogance.—(Bṛhaspati).

52. But if there are cogent reasons for the man's non-attendance, he shall not be fined, he shall be summoned again.

53. If the plaintiff has recourse to improper methods of restraint—such as preventing the man from paying the calls of nature and so forth,—he shall be punished.

54. Persons who have climbed a hill or a tree, or are travelling on carts or boats, or riding a horse or elephant,—shall not be put under restraint.

55. The cultivator shall not be put under restraint during the sowing season, nor until he has harvested and garnered the crops ;—nor one who is about to marry, or very ill, or going to perform a sacrifice, or who has already been sued by another person, or one who is working for the state ; nor soldiers during a war, nor a minor.

56. These persons are also not to be summoned.

57. The time for realising dues from these persons is—from the trader, after he has sold his commodities; from the cultivator, after the harvest; from the sacrificers, after the completion of the performance.

58. If the person put under restraint fails to present himself before the Court, he is to be summoned by the King. (a) But before summoning the defendant, the Court shall take from the plaintiff a surety, who will undertake to produce the latter when the defendant turns up.—(Nārada).

59. The officer carrying the summons shall have his fooding and allowances paid by the person summoned.

## (D) TRIAL.

60. When in answer to the summons, the defendant has appeared in Court, he shall be kept in a guarded place.

61. The Judge and the Court shall—before the case is decided (Aparārka)—[in cases where a summary trial and judgment are not possible, according to Vishvarūpa]—take sureties for both the plaintiff and the

defendant ; (a) the surety should be one who is able to meet the liabilities under dispute ; e. g. the amount of debt involved, or the amount of fine likely to be inflicted and so forth. (Yājña. 10 b).

62. If no sureties be forthcoming, officers should be appointed to watch the parties ; the wages of these officers being paid daily by the parties concerned.

Notes.

According to the Aparārka, these wages are to be realised subsequently from the defeated party.

The taking of sureties is necessary, because the law is that if the defendant denies the claim set up by the plaintiff,—and the latter succeeds in substantiating his claim, by means of oral and documentary evidence, then the defendant has to pay the amount of the claim to the plaintiff, and also an equal amount as fine, for false denial, to the King. On the other hand, if the plaintiff fails to substantiate his claim, he becomes a false claimant, and thus liable to pay to the King a fine which is the double of the amount claimed. (Yājña. 11).

The same rule holds also in cases where the defendant's answer takes the form of 'Confutation', or of 'Citing of Previous Decision.' In this case the plaintiff becomes the 'denier', and hence, if he is made to admit the contention of the defendant, he becomes liable to pay a fine equal to the amount of his claim. If on the other hand, the defendant is unable to establish either the 'Previous Decision' or the 'Confutation', then the becomes the 'false claimant', and as such, liable to pay to the King a fine double the amount of the claim, and to the plaintiff, the full amount of the claim.

In a case where the answer of the defendant has admitted the claim, there is no fine.

Though these rules are directly applicable to cases of Recovery of Debt, yet they may be applied to cases dealing with the other Heads of Dispute also. If the plaintiff fails to prove the charge he has brought against the defendant, then, being a false accuser, he shall pay a fine which should be the double of what the defendant, if proved guilty, would have had to pay. If on the other hand, the defendant denies the charge, and the plaintiff establishes it against him, he shall pay to the King the fine prescribed as penalty for the offence.

Similarly in cases of 'Confutation' and 'Citing of Previous Decision.'

63. If the surety fails to produce the party he stands surety for, he shall pay the amount of the claim; but the son of the surety shall not be liable for this payment, if the surety had stood for appearance only; but if the surety had stood for payment, then his heirs can be made liable.—(Manu 8. 158-160).

64. The following persons are not admissible as sureties :—

The master, a known enemy, a person deputed by the master, a disloyal person, one who has himself been fined, one who is himself under trial, state-servants, ascetics, one who is unable to pay the claim or the fines, one who is not known to the Court.—(Kātyāyana).

65. If a party fails to offer the requisite surety, he should be kept under guard; the wages of the guard being paid by him at the end of each day. Shūdras should be kept in chains. But when so guarded, the man shall not be kept from his obligatory duties.—(Kātyāyana).

66 Suits are to be tried in the order of the castes of the plaintiffs, the Brāhmaṇa's suit should be heard first, and so on:—(Manu 8. 24).

67. Where the suits filed are not of equal importance, they have to be taken in the order of their importance, (Medhātithi).

68. Until the charge against the defendant himself has been disposed of, he shall not bring a counter-charge against the plaintiff.—(Yājña. 9).

Notes.

This prohibition however does not apply to the answer in the form of Confutation ; though this also involves a sort of counter-charge, yet it it is more in the nature of answering a charge than in that of a counter-charge.

69. If there is a counter-charge, the complaint should be made *after* the charge first brought against the man has been dealt with.

70. No fresh complaint should be lodged against a person who has already been charged by another person and is still under trial.—(Yājña. 9).

71. In the written plaint, the plaintiff should not alter the nature of the claim originally lodged orally.—(Yājña. 9).

Notes.

E. G. If on the former occasion he has complained that 'the man is not paying up the hundred rupees that he had borrowed,'—this should not be altered, in the written plaint, into the form that 'he took 100 rupees from me by force'.

Nārada says—'The plaintiff who renounces the ground of charge previously made and takes up another is to be regarded as a *person* of lost cause.'

According to the A parārka what is prohibited is a subsequent statement which is inconsistent with, or contradictory to, what has been said before.

In civil suits the prohibitions here set forth do not affect the main issue of the case. They only interdict certain contingencies which are undesirable, in the sense that they render the person concerned liable to punishment. But in criminal cases, the said contingencies also affect the main issue, and make the man liable to lose his case. For instance, if the first report has been in the form 'I have been struck by the defendant by his feet in my hand', and in the written charge he says 'I was struck by hand in my legs', he is not only to be fined for this prevarication but also liable to have his main case dismissed.

72. *Counter-charge* is permissible in cases of Abuse, Assault and Violence. (Yājña. 10 a.).

Notes.

In such cases, the defendant may make a counter-charge, even before he has answered the charge brought against himself. And such counter-charge is made, not for the purpose of starting simultaneous cases, but only for that of having his own punishment reduced. For example, a man who has been charged with assault, may urge, in extenuation, that the complainant had struck him first; and if he succeeds in proving this, the punishment inflicted upon him would be lighter than what it would have otherwise been. In fact, the same penalty is inflicted on both parties ; though according to Nārada, the man who committed the assault first deserves heavier punishment than the one who only retaliates.

73. In the event of a counter-charge, that party should be heard first whose grievance is the more serious.

74. Very serious charges of violence, theft, assault and defamation, and also of hurting or killing the cow and such other cattle, and those relating to women [those *against* women according to Vishvarūpa] should be heard immediately ; and the defendant should be made to answer the charge at once.—(Yājña. 12)

Notes.

In other cases, if the latter asks for time, this may be granted and another day fixed for the hearing; the grounds for such request have been described by Bṛhaspati as extreme shyness and fear. Kātyāyana lays down detailed rules as under :—

75. If the act complained of has been committed on the same day, the case should be heard on that very day; if the occurrence took place a year before, the hearing may be postponed for a day; on the lapse of six years, it may be postponed for three days; after twelve years, for seven days; after twenty years, for 10 or 15 days; after 30 years, for one month.—(Kātyāyana).

Notes.

But discretion is given to the Court, to be exercised in view of the merits of each case.

If the case is a difficult one and the Court finds it necessary to devote more attention to it, it may itself postpone the hearing.

### NON-SUITING-WITHOUT HEARING.

76. If a creditor tries to realise the debt, not admitted by the debtor,—without seeking to prove his claim in a court of law—by arresting him, or by some other forcible means, he shall have his claim dismissed and also be fined.—(Yājña. 16)

Notes.

This means according to Mādhava (P. 58), that the man can never revive his claim.

77. If a debtor should run away without paying the debt which has been admitted by him, or which has been proved in a court of law,—he also loses the case and shall be fined.

78. On being summoned by the King, if the accused declines to make any statement in Court, he also loses the case and shall also be fined.

79. On being questioned, if the man mentions a wrong place (as one where the transaction took place), or retracts a previous statement, or makes mutually contradictory

allegations, or fails to support an allegation, or prevaricates,—or secretly converses with a witness, or shirks investigation,—or, on being questioned, remains silent,—such a person fails in his suit.—(Manu 8. 53.—60)

### Notes.

Medhātithi—After the plaint has been duly explained to the defendant, and on being questioned about it,—the latter is unable to answer any questions, he should be 'non-suited'. The time within which the defendant must submit his answer is 45 days. But the plaintiff should answer questions relating to his plaint, on the same day; if he fails to do so, he shall be imprisoned and fined.

80. On being asked to name his witnesses, if the party fails to name them, he shall be non-suited.—(Manu 8. 57)

81. (1) Having made one statement, if he subsequently makes a totally different one ;—or if he says to the defendant 'I have said nothing against you';—(2) if he shows disrespect towards the Assessors or the witnesses ;—(3) if on being summoned, he fails to appear ;—(4) if he fails to put in the Rejoinder ;—or (5) if he absconds after being summoned,—he shall be non-suited.—(Nārada, in Mādhava P. 64).

82. The party is 'defeated' (1) if he, on being summoned, absconds, or (2) remains silent, or (3) is refuted by evidence, or (4) himself admits the claim.—The absconder is to be 'defeated' after a foritnght ; the man who gives no answer, after seven days, and the other two, at the time of the hearing.—(Bṛhaspati).

### Notes.

But if these delinquencies are found to be due to circumstances beyond the man's control, he shall not suffer for them.

83. Even after the suit has been decided against the above four kinds of men, they can revive their case after payment of a fine ;—the man who changes his statement paying

5 Paṇas; one who has shown disrespect to the Court 10 Paṇas; who does not attend, 12 Paṇas; the man who does not answer, 16 Paṇas; one who absconds on being summoned, 20 Paṇas.—(Kātyāyana).

### Notes.

The rule that a complaint cannot be revived (Kātyāyana) is meant for ordinary criminal cases, not for civil suits—(Mādhava P. 58),—specially those relating to cattle, women, land and debts, where the delinquent may be fined, but he does not lose his claim (Nārada).

Hints have been provided for the Court to determine whether a deponent—plaintiff or defendant or witness—is honest or dishonest. For instance, if the man, while in Court, shows signs of his mind, speech, body or movements being affected, without any apparent cause,—he should be regarded as 'dishonest.' The following are a few of these signs:—(1) He changes his position constantly, does not stand in one place for any length of time, (2) keeps passing his tongue over the corners of his mouth,—these two being signs of his 'movements' being affected,—(3) perspiration breaks out on his forehead, (4) his face becomes pale or dark, (5) he twists his lips—these being signs of his 'body' being affected,—(6) his speech is choked and halting, (7) he talks much and inconsistently,—these being signs of his 'speech' being affected,—(8) he fails to answer questions addressed to him, and does not look in the face of the questioner,—these are signs of his 'mind' being affected.

All these are mere indications of the possibility of dishonesty; they should not be taken as absolute proof of the man being dishonest; it being difficult to discriminate whether the signs are actually the effect of nervousness due to consciousness of guilt, or those of the man's natural nervousness in the special surroundings. The Aparārka definitely asserts that these are to be regarded only as 'auxiliary evidence', and not such evidence as should be the sole basis for decision.

## COMPOUNDING.

84. If the parties come to an understanding after the preliminaries have been finished and the trial has commenced, —they should be fined 'double the amount' of the claim.—(Bṛhaspati in Mādhava P. 58).

### Notes.

But according to Kātyāyana, this refers to cases where the parties have deceived the King ; and in cases where there is no such deception, the parties coming to an agreement are not to be fined.

In certain cases there is mutual settlement by the order of the King ;—in cases where the evidence on both sides is equal, for instance.

## (1) PLAINT.

85. There are four factors in a case :—(1) Plaint, (2) Rejoinder, (3) Evidence and (4) Judgment. When, in answer to the summons, the defendant has presented himself, the claim should be reduced to writing, in the presence of the defendant, exactly in the form in which it had been set forth previously [e. g., according to Vishvarūpa, stating the charge along with all attendant details introductory and explanatory] ; and this written claim should be dated, with the names and castes of the two parties, (or according to another explanation, the nature and species of the property in dispute,) the substance, amount and number of the property, the year, the month, the fortnight, the day and other details duly stated therein.—(Yājña 6).

### Notes.

The claim thus set forth in all its details is what is called '*Bhāṣā*', '*Pratijñā*', '*Pakṣa*' i. e. *Plaint*. The difference between 'claim' and 'plaint, lies in the fact that when the *claim* is preferred in the first instance, it states merely the claim, while in the *plaint* it is set forth in full detail and in due form. The plaint that is not in proper form should be rejected.

The insertion of the *year* is not necessary in all cases; it being essential only in cases of deposits, gifts and sales, and also in money-lending transactions.—The names of the country and town and so forth are to be stated only in the case of immovable property. Says Kātyāyana—'Country, town, exact situation, caste of the parties, names of the parties and their neighbours, residence, documents, exact measurements, specification of the field or land, names of three ancestors of the parties, also the names of the King and his two predecessors,—these should be stated in all disputes over immovable property.'

The Aparārka adds that of the details, only those should be mentioned which have any bearing upon either the establishing or the rejecting of the claim. For instance, when the claim pertains to debts, it is necessary to mention the date in detail, for the purpose of computing the interest.

Plaints that do not fulfil the necessary conditions are to bo regarded as invalid. The grounds of invalidity have been thus set forth in detail:

86. The King shall reject every plaint which is either palpably absurd or irremediable or meaningless or futile or unprovable or self-contradictory.

Notes.

'*Absurd*'—e. g. 'The defendant is not returning to me the hare's horn that I had lent him'.—'*Irremediable*'-e. g. 'This man takes advantage of the light emanating from the lamp in my room'.—'*The meaningless*'—e. g. 'He has taken my *Abracadabra*'.—'*Futile*'—e.g. 'This man relates Vedic texts in a sweet voice near my house.'—'*Unprovable*'—e. g. 'Devadatta laughed at me' (in proof of which no evidence can be adduced. '*Self-contradictory*'—e. g. 'I have been abused by a dumb man'. '*Viruddha*', according to Aparārka, may mean 'what is prejudicial to the best interests of the state or the country'; this is in accordance with Kātyāyana.

Among inadmissible plaints, some texts (e. g. that of Kātyāyana) mention also 'one that is anēkahadasaṅkīrṇa'. This has been taken by the Aparārka to mean that plaints have to be rejected on the ground of 'misjoinder of claims'; but the Mitākṣarā does not accept this view; it argues that even such plaints are admissible as 'this man has taken from me gold, silver and clothes' (where though the dispute is under one head, yet it pertains to several things),—or as 'this man has borrowed from me money on interest, I deposited gold with him, he is wresting my field from me' (where the plaint refers to several heads of dispute).—What is really meant by the text in question is that whenever such a 'mixed up' plaint happens to be presented, each part of it should be dealt with and tried separately. This has been distinctly laid down by Kātyāyana. The words of Kātyāyana, quoted by Aparārka (p. 610), mean that 'the King shall admit a plaint even though it contains several assertions', such as 'The defendant borrowed from me 100 gold-pieces in Pāṭaliputra, and then after a month at Benares he borrowed some clothes and again after a year some grains'. There is no 'misjoinder' in this case as every one of the assertions falls under the same 'head.'

87. The complaint of one man against several is inadmissible; so also is the complaint of the teacher against his pupil, or that of the father against his son, or that of the husband against the wife and *vice versa*, or that of the master against the slave and *vice versa*.—(Nārada).

### Notes.

The Aparārka (p. 611) adds that the complaint of one man against several is inadmissible only simultaneously; it can certainly be admitted and dealt with severally one after the other; that in the case of slaves, they should be sued in the name of their masters;—what is said regarding the teacher and his pupil means that if the teacher has chastised the pupil according to law, no charge of criminal assault shall lie against him.

According to Vishvarūpa, the inadmissibility of suits between near relatives, such as husband and wife and so forth, is indicated by the term '*paraih*' in Yājñavalkya's definition, which he explains as 'not related'.

88. (1) If only one person claims the property which belongs to several persons;—(2) if the measurements of the land, or the number of articles claimed, do not tally with the real state of the things concerned, the plaint is to be rejected; —(3) so also if the plaint fails to mention the source from which the plaintiff acquired the thing under dispute—whether gained by learning, or acquired by purchase or inherited; (4) if the year, the month, the fortnight, the date and the day are not entered;—(5) if the plaintiff cites his witnesses before the other party has put in his rejoinder; (6) if the plaint is dubious, not definite; (7) if it is set forth in wrong order; (8) if the details of the property are described, and not the property itself; (9) if it is confused; (10) if it is futile, i. e. not stating facts and proofs; (11) if it is barred by limitation; (12) if it contains a double claim, and entails the necessity of proving two propositions—the plaint is invalid.—(Nārada in Mādhava p. 49).

89. The term 'complainant' includes also the son or the father, or some other person duly authorised by the complainant. The defeat or victory of these representatives constitutes the defeat or victory of the original complainant himself.

90. What has been stated by the complainant, or his accredited agent, should be reduced to writing; first on the ground or a wooden slab; and then after having been duly revised and corrected, it should be conveyed on paper (Kātyāyana). (a) The corrections and elucidations and also additions to the plaint can be permitted only until the Rejoinder has been submitted and seen.

91. The Court should never call for the Rejoinder until the Plaint has been duly revised and amended by the complainant.

92. If through some physical disability the complainant is unable to make his full statement on the spur of the moment, he should be given some time to recover his composure.

93. Where the plaint is accompanied by a counterplaint, that party should be allowed the first opportunity of stating his case who belongs to the higher caste ; or (according to Nārada), that man whose complaint is more serious should be allowed precedence.

94. Complaint is of four kinds :—(1) Suspicion, in which the defendant is only suspected of having wrongfully taken what belongs to the plaintiff ; (2) Definite charge, in which the lost property has been actually found in the possession of the defendant ; (3) Claiming of one's dues ; and (4) Appeal—request for revision of decision.—(Bṛhaspati in Parāsharamādhava p. 51).

## (2) REJOINDER —ANSWER.

95. After the defendant has heard the plaint read out to him, his answer should be taken down, in the presence of the plaintiff.—(Yājña. 7 a).

### Notes

Vishvarūpa explains that the last condition is added in order to enable the Court to come to an immediate decision, and must pertain only to suits of very urgent character. This Answer or Rejoinder should be one that (a) traverses the plaint, (b) is reasonable or firm (Aparārka), (c) definite, (d) consistent. and (e) not couched in difficult language.—It shall not be 'too lengthy' says Hārīta.

96. In criminal cases the answer should be called immediately after the complaint ; in other cases the time for the answer may be extended, in accordance with the wish of the parties, or of the Court. (Yājñavalkya 12, Mitā. P. 280, also Nārada 1.32).

97. There are four kinds of Rejoinder—(1) Admission :—the plaintiff having urged that 'this man owes me a hundred rupees', the defendant answers 'yes, I do owe it'; (in this case the suit ends at this second stage, says the Aparārka) (2) Denial ;—may be in four forms—(a) 'This is not true, I do not owe anything', (b) 'I do not know anything about it', or 'I do not remember' (Aparārka), (c) 'I was not present at the place mentioned by the plaintiff', (d) 'I was not born at the time mentioned by the plaintiff';—(3) Confutation : e. g. the defendant admits the loan but asserts that it has been repaid,—and (4) Urging a previous legal decision : 'The claim that has been preferred against me by the plaintiff has already been disposed of by a previous decision of the Court.'

Notes.

Rejoinders not fulfilling these conditions are called 'wrong'. For example—(1) the *indefinite* or *doubtful* rejoinder : The claim being in regard to 100 gold pieces, the answer is 'I did borrow but either 100 gold pieces, or only 100 *māṣa* of gold ; (2) *Irrelevānt* ; the claim being in regard to 100 gold pieces, the answer is 'I owe 100 copper pieces' ;—(3) *Mesagre* : 100 gold pieces being claimed, the answer admits five ;—(4) *Excessive* ; 100 gold pieces being claimed, the answer admits 200 ;—(5) *Touching a part of the claim* ; gold and clothes being claimed, the answer admits the gold ; (6) *Confused* ; the plaint is in regard to debts, the answer refers to some other head of dispute ; e. g. the claim being in regard to 100 gold pieces, the answer is 'I have been assaulted by him' ;—(7) *Irrelevant regarding place* : the complaint being that 'the man has wrested my field situated in Benares on the Eastern side', the answer is simply 'I have taken possession of a field';—(8) *Inexplicit* : the claim being in regard to 100 gold pieces, the answer is 'Is it I alone who owe money'? The implication being that the judge or the complainant himself may be owing money to people ; (9) *Couched in unintelligible language* ; unusual words being used, e. g. *'arjuna'* for the Cow (Aparārka).—(10) *Inconsistent* ; 100 gold pieces being claimed, the answer is —'I did borrow the money—I do not owe it' ;—(10) *Couched in difficult language* ; (11) the claim being that the defendant's father had borrowed 100 gold-pieces from the plaintiff, the answer is '*Gṛhītashatavachanāt suvarṇānām piturna jānāmi*', which means 'I never heard from my father that he had borrowed a hundred gold-pieces,' but is difficult to construe—(12) *Unreasonable* ; 'the claim being that the man having borrowed hundred rupees on interest, he has paid the interest, but not the principal,' the answer is 'It is true that I paid the interest but I never borrowed principal'.

98. The following are the inadmissible forms of Rejoinder;—(1) *Aprasiddha*, unknown or unintelligible—when the statement is made without proper knowledge of the nature and number of articles claimed, or of the time of the alleged transaction; or when the statement is made in language not known to the Assessors ;—(2) *Contradictory*:—having asserted 'I repaid the entire debt during my childhood,' later on it is added 'I did not pay';—(3) *Too brief* ;—(4) *Too diffuse* ;—(5) *Doubtful* ;—i. e. couched in words admitting of double meaning, e. g. '*mayā-deyam*' which may mean 'I should pay' (*mayā deyam*), and also 'I should *not* pay' ( *mayā adeyam*);—(6) *Impossible*:—e. g. the man being only 16 years of age, says 'this was paid by my grandson';—(7) '*Couched in difficult language*';—(8) *Irrelevant* : instead of answering the claim for the debt, the man says, 'the plaintiff has beaten me';—(9) *Defective*: if the man admits 200, when the claim is for only 100 ;—(10) *Inexplicit* :—when the words are uttered indistinctly and in a round-about manner ;—(11) *Confused* : '*kintenaiva sadādeyam mayādeyam*', which may mean 'Is he always to pay and I to repay', or 'Is he always to repay' or 'Is he always to pay and I to pay';—(12) *Difficult*, requiring an explanation ; and (13) *Puerile*, which has no bearing on the case.—(Kātyāyana-Parāsharamādhava, P.8.57-60

99. The Rejoinder should contain a single answer, definite and to the point,—there should not be a jumble of statements.

## Notes.

That such a Rejoinder is not right is due to the fact that it confounds the issues; the plaintiff has claimed the repayment of the loan of a 100 gold-pieces and a hundred rupees, if the defendant's answer is that 'he never borrowed the 100 gold-pieces, the 100 rupees he had borrowed but has repaid it',—this is not right. Similarly there may be misjoinder of Confutation and Citing of previous Decision; e. g. in the aforesaid claim, if the answer is that '100 gold-pieces that were borrowed by me have been already paid, as regards the claim of 100 *rupees*, this has been already disposed of by a previous law-suit',—it will be necessary for the defendant to adduce evidence, oral or documentary, in support of the first part of his answer, and either adduce the previous decision, or prove it otherwise, in support of the second part; and this would give rise to confusion.—Similarly in cases of the misjoinder of three or more forms of answer.

These mixed Rejoinders are inadmissibie only when they are taken together; but there would be no confusion if each one of the several issues raised were dealt with separately, in a definite order;—this order being determined by the wish of either the plaintiff, or the defendant, or the Court. In a case where the two parts of the Rejoinder are such that the subject-matter of one is much less than that of the other, then that which pertains to the larger amount should be taken up first; in a case where one part of the answer admits a claim and another disputes it, the latter should be dealt with first; as no investigation is needed regarding the point admitted; e. g. the claim being that the man has borrowed (1) 100 gold-pieces, (2) 100 rupees and (3) clothes,—if the answer admits (1), denies (2) and in regard to (3), sāys that he did take them, but had returned them. In the same case, if there is a mixture, in the Rejoinder, of 'Denial' and 'Previous Decision', the part of the claim covered by the Denial should be taken up first.

An example of another kind of mixed Rejoinder we have in the case where the plaintiff having claimed that 'This is my cow, lost on such and such a date, and seen in the house of the defendant', the answer is—'This is not true, this cow was in my house, or was born in my house, long before the day mentioned in the plaint'. This cannot be a wrong Rejoinder, as it does succeed in traversing the claim ; nor is it in the form of mere *Denial,* as it contains confutory arguments also. It must therefore be regarded as a *Denial accompanied by Confutation.* In such cases the onus lies on the Defendant. So also in cases of mixture of Denial and Citation of Previous Decison.—In no case should there be a commingling of issues.

Why the mixed Rejoinder is inadmissible is explained by the Aparārka. In the case of the Rejoinder being in the form of 'Denial' the onus of proof lies on the plaintiff ; while in the case of its being in the form of 'Confutation', it lies with the defendant ; so that if the Rejoinder is of a *mixed* character—partly 'denial' and partly 'confutation'—then the onus becomes divided and this confounds the issues.

100. After both parties have reduced their statements to writing, and after the commencement of the trial, if either party says anything not already contained in the written statement, he loses the case.—(Kātyāyana).

101. If the defendant does not put forward any answer, he should be made to do it.–(Bṛhaspati—*Parāsharamādhava* P. 53).

102. If no answer can be got from him after seven days, the claim should be decreed against him.—(Kātyāyana, Ibid P. 64).

103. 45 days are to be allowed for the defendant to set forth his answer; after which, if he does not submit his Rejoinder, he shall be non-suited.—Manu (8. 58).

Notes.

In some cases Gautama (13. 28) allows a year; but according to Medhātithi, Gautama's rule is not, and should not, be observed in practice. His conclusion is that the Court should grant just

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as much time as it may consider sufficient for the party to understand the claim and prepare his answer.—This postponement, remarks Medhatithi, is not to be granted in the case of serious or criminal cases; the defendant should in these cases answer the charge at once; specially as serious criminal cases should be *not* compoundable; it being the duty of the King to punish all criminals.

104. If, through shyness, or fear, or, want of recollection, the defendant applies for time, it should be granted;—this postponement being for 1, 3, 5, 7, 15, 30, 90, or 360 days, according to the circumustances of the case. If the matter of the complaint is such as has occurred at that very moment, the rejoinder must be made immediately; if after a month has elapsed since the occurrence, one day's time may be given; if 6 years have clapsed, 3 days; if 12 years, 7 days; if 20 years, 10 days or 15 days; if 30 years, a month; after that, a month and a half; in the case of such defendants as are either dependent, or idiotic, or insane, or minor, or initiated, or invalid, postponement up to one year may be granted.—(Nārada—Mādhava P. 85).

105. In cases where either the principal party or the witnesses are away in foreign lands, the hearing should be postponed till their return.—(Kātyāyana—Mādhava P. 55).

106. Postponement is to be granted on account of the subject-matter of the dispute being complicated, or of some incapacity in the parties, or of loss of memory.—(Nārada—Mādhava P. 54).

107. In cases relating to debts, pledges and deposits and gifts and inheritance, postponement should be given.—(Pitāmaha—Mādhava P. 55).

108. In the case of serious criminal offences,—of violence, theft, defalcation and assault,—and in disputes about land, the trial should be immediate.—(Bṛhaspati Mādhava P. 56.);

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also in disputes relating to cows, bulls, lands, women, sale, violating of virgins and perjury.—(Kātyāyana).

109. Of *Denial*, as a form of Rejoinder, there are four varieties: (1) 'The claim is entirely false', (2) 'I know nothing of the claim', (3) 'I was not present at the time of the alleged transaction'; (4) 'I was not born at the time of the alleged transaction'.—(Prajāpati—Mādhava P. 57).

### (3) EVIDENCE—CITING OF PROOFS.

110. Immediately after the Rejoinder has been put in, the Plaintiff shall state in writing the proofs in support of his claim.—(Yājña-76–8).

111. If the defendant denies the plaintiff's claim, the latter should cite his witnesses, or adduce other evidence, in the shape of documents and so forth.—(Manu 8. 52).

112. But in a case where the Rejoinder is in the form of the Citation of a previous Decision, the requisite proof has to be adduced by the defendant (Hārīta); this proof consisting in the production of the previous decree (Vyāsa).

113. In the case of the Rejoinder being in the form of a Confutation, the defendant has to adduce the proof in support of his confutation.

114. In a case however where the Rejoinder admits the claim, there being nothing to be *proved*, no proof has to be adduced, and the suit ends with the said admission.

115. The defendant, denying the claim, shall be convicted by the plaintiff producing at least three witnesses.—(Manu 8. 60).

116. 'Document,' 'possession' and 'oral evidence' are the proofs; in the absence of *these*, 'ordeals'—(Yājña. 2. 22).

Notes.

Proofs are of two kinds—(A) Temporal and (B) Spiritual. Under the former are included (1) Witnesses, (2) Documents and (3) 'Anumāna', i. e. arguments or reasoning. There are 12 kind of 'witnesses', 8 kinds of 'documents'. (Bṛhaspati). The 'Temporal proof is stronger than the 'Spiritual'; between oral and documentary evidence, the latter is stronger ; in the matter of conditions obtaining among guilds and tribes, Documentary Evidence is the only one admissible—neither Witnesses nor Ordeals ; but oral evidence is the only evidence admissible in cases relating to payment-non-payment, disputes between master and slave, rescission of sale, gambling and violence. (Kātyāyana—Mādhava P. 61).

*Anumāna* (which means reasoning or argument) has been interpreted by Mādhava (P. 61) as *Possession*, on the ground that Yājñavalkya mentions 'bhukti' (Possession) in its stead.—But Kātyāyana has 'yukti' 'argument', in addition to 'bhukti', 'possession' (Mādhava P. 63).

117. Open transactions are to be proved by witnesses and secret ones by ordeals ; but in cases of misappropriation of deposits, and where the defendant is accused of a 'heinous' crime (*Mahāpāpa*),—even though there be witnesses—decision is to be based upon ordeals.—(Bṛhaspati—Mādhava P. 62).

118. Ordeals also come of use where witnesses equally reliable are produced by both parties, or where the dispute involves matters of life and death, (Kātyāyana); or where documentary evidence is proved to be defective or unreliable.

119. Documents are of *two* kinds only—Royal Edict (Yājña. 1. 318) and Deed executed by ordinary man (Yājña. 2. 80—84);—.

120. 'Possession" is using.

121. 'Oral evidence' consists in the deposition of witnesses.

### Notes.

All available authorities are agreed that ordeals are admissible as proof only when neither of the other three is available; or, even though available, it is not sufficiently reliable. Hence, in a case where both parties come to the Court simultaneously, and one of them bases his claim upon 'temporal' proof, while the contention of the other refers only to 'ordeals', the claim of the former has to be accepted.—In fact, even in cases where only a part of the claim is based upon 'temporal' proof, no ordeal need be admitted. For instance, where the claim is in the form 'this man has borrowed from me a hundred rupees on interest', and in adducing proofs the plaintiff says, 'I have witnesses to prove that he borrowed money from me, but as regards the exact amount borrowed and the rate of interest, I have no other evidence, but I appeal to ordeal',—in this case, if the witnesses adduced are found to be reliable in support of the claim, the whole claim may be decreed, and it is not necessary to have recourse to ordeals. In fact, wherever ordeals have been prescribed, it is to be taken as governed by the qualification that recourse is to be had to them only when none of the 'temporal' proofs is available.—(Mitākṣarā on Yājña. 2. 22).

There are restrictions also in regard to the admissibility of the *oral* and other kinds of temporal proof For instance, (a) in the matter of transactions among members of the same guild or tribe, documentary evidence is the only proof admissible, and not *oral* evidence or ordeals; (b) in the matter of Easements,— disputes regarding door-way, right of way, drains and so forth,—weight attaches to possession only, not to ordeals or oral evidence;—(c) in disputes relating to the non-payment of wages, non-delivery of articles sold, gambling, and so forth, oral evidence is the only proof admissible, not ordeals or documents.—(Mitākṣarā).

Pitāmaha entirely excludes ordeals from all disputes relating to immovable property, and Kātyāyana from those relating to land, to defamation, to non-payment of wages, to non-delivery of articles sold, to gambling.—Vyāsa restricts ordeals to secret transactions alone.—Ordeals are admissible in all cases where there is conflict among equally reliable witnessess, or where a document adduced in proof is alleged to be forged.—(Aparārka).

122. In cases where no evidence is available, the King shall exercise his own judgment. –(Pitāmaha—in Mādhava P. 64).

## DETAILED RULES.

### Order of Calling Witnesses.

123. In a case where two persons file the plaint simultaneously, with regard to the same property, the Court should first call the witnesses of that party the alleged date of whose possession is earlier than that of the other party.—(Yājña. 17).

Notes.

E.g. When a certain plot of land has been given to a man and remained in his possession for a few years, after which he goes away to foreign lands; another person also in the meantime may have been given the same plot of land and after having retained it for a few years he also goes away; after a few years both of them return and claim the land, and go to court over it.

124. But in a case where the plaint becomes 'subordinated' or 'eclipsed' by being admitted in the Rejoinder, the defendant's witnesses have to be called first.

NOTES.

E. g. in the said case, if the Rejoinder is in the form of Confutation,—'it is true he got the land before me, but he sold it to the King who thereupon gave it to me',—or that 'the man himself gave it to me before he left.'

The above is the explanation of Yājñavalkya's text by the Mitākṣarā. The Aparārka offers a different explanation. The Mitākṣarā is not quite acceptable; because it cannot be right for the author to lay down rules regarding a very special case in the very beginning. According to the Aparārka, the rule is that (a) in cases where both parties adduce witnesses, those of the plaintiff should be called first, and that (b) those of the defendant are to be called only after the plaintiff's statement has become 'subordinated'. The Aparārka goes on to explain in what cases there is a chance of witnesses being produced by both parties. There is no possibility of this in cases where the Rejoinder is a pure 'Denial', in which case, it is only the plaintiff who is required to produce witnesses. But in cases where the Rejoinder is in the form of either 'Confutation' or 'Citation of Previous Decisions', it is possible for witnesses to be produced by both parties. For instance, the defendant may state in his Confutation—'what I owed you I have already paid'; to which the plaintiff replies—'you did pay the amount, but that was for paying to some one else, and not for paying off the debt due to me, which I can prove by witnesses';—in this case both parties have to produce witnesses. Similarly when the Rejoinder urges 'Citation of a previous Decision,' the plaintiff may say—'It is true that the decision cited by you went against me; but later on I got that decision reversed'; in this case also witnesses have to be produced by both parties.—In both these sets of cases it becomes necesseary for both parties to produce witnesses; and (a) ordinarily the witnesses of the plaintiff should be called first; (b) but in some cases, it so happens that the plaintiff's statement becomes 'eclipsed'; when, for instance, it is admitted in the Rejoinder; e g. when the Rejoinder is 'what the plaintiff says is quite true, I did borrow the money from him, but I paid it off';—in which case the plaintiff's statement ceases to be of any significance, not calling for an investigation, having been admitted by the other party, and what becomes an object of investigation is the defendant's statement that he has repaid the debt; hence in this case the witnesses of the defendant have to be called first.

In this connection Vishvarūpa points out that, in the case just cited, it may be that the Rejoinder is answered by the plaintiff by a counter-confutation; and these confutations and counter-confutations might go on *ad infinitum*. The remedy for this lies in the creditor laying a *wager*; and the law in this case is laid down by Yājña. 18;

which means that in a case where the creditor has laid a wager, if he establishes his claim, the other party should be made to pay to him the amount of the claim as also that of the wager. In this explanation '*svapaṇam*' has been taken as 'the wager laid by the creditor-claimant' (*svataḥpaṇa*). The Aparārka and the Mitākṣarā have widened the scope of this rule, and do not restrict it to the particular case set forth by Vishvarūpa. According to them, it formulates the following rule.

125. If the suit is one accompanied by a wager, on both sides, then the defeated party should be made by the court to pay the wager as also the amount of the claim and also the fine.—(Yājña. 18).

NOTES.

There are cases however where only one party, in a fit of rage, lays the wager 'if I am defeated in the suit, I shall pay a hundred rupees',—but the other party does not accept the wager ; in such cases if the suit is lost by the former, he should pay the claim as well as the wager ; but if he has won it, then the other party should pay the fine and the claim, not the amount of the wager.

126. The fine and the wager are to be paid to the King and the claim to the plaintiff.—(Vishvarūpa and Aparārka).

127. In all disputes relating to property, greater importance attaches to the later transaction. (Yājña. 23 a).

NOTES.

That is to say, if the defendant succeeds in proving the authenticity of *repayment*—which is later than the *lending*,—then he wins the suit, and the plaintiff loses it, though the latter may have succeeded in substantiating the fact of the *lending*. For instance, the plaintiff sues the defendant for the recovery of a loan,—the latter answers that he has already repaid it,—even though both parties may succeed in proving their contention, the decree should be in favour of the defendant.

Similarly in a case where a man is sued for Rs. 100, but subsequently admits the loan of Rs. 200, the decree against him should be for Rs. 200. (cf. *Nārada* 4. 25). The Aparārka cites a different example:—If the creditor advances, in the first instance, a loan on interest at the rate of 5 per cent,—but subsequently he reduces the rate to 2 p.c.,—his claim is to be decreed at the latter rate.

128. To this rule however there are certain exceptions: In disputes relating to Mortgage, Gifts and Sales, greater importance attaches to the earlier transaction.—(Yājña. 236 Mitākṣarā, p. 311).

### Notes.

For example,—if A has mortgaged a plot of land to B and has borrowed money from him,—later on, he mortgages the same land to C,—the decree lies in favour of B.

Vishvarūpa's interpretation of these two rules is entirely different; he proposes two explanations—(1) (a) In all disputes, the last-mentioned proof, i. e. ordeal, is the strongest; (b) in the matter of pledge and the rest, the *first*, the documentary evidence, is the strongest;—or (2) (a) Among conflicting written documents, the latest is the most authoritative; (b) in the matter of pledge etc., the earliest is the most authoritative.

## LIMITATIONS REGARDING 'POSSESSION' AS PROOF.

129 (*a*) If a man sees his land being enjoyed by a stranger [i.e. one not related to him, says Vishvarūpa], and does not complain,—that land becomes lost to him after 20 years;—(*b*) in the case of movable property, he loses it after 10 years. (Yājña. 24 and Nārada 4·5&9).

### Notes.

The Mitākṣarā (P. 325) explains that what this means is only that by such adverse possession extending over 20 years uninterruptedly, the *usufruct* of the property becomes lost,—and not that the property is lost, or that the man's title to it drops entirely. That is to say, by filing a suit and proving his title to it, the man can regain his property ; but he cannot claim the produce of the land during the past years. In cases however where the adverse possession has continued without the man's knowledge, he is entitled to the produce also—even after the lapse of 20 years. The 'adverse possessor' is always liable to punishment ; the law being that he should be punished 'like a thief' (Nārada 4·14). Mere possession does not create in him a right over the property, says Vishvarūpa, who holds that all that the text means is that it is not right to ignore the possession by others of one's property; and when it speaks of 'loss', all that is meant is that he cannot claim it in a court of law. As for the property, the King may either confiscate it or hand it over to the rightful owner.

The Aparārka however takes the 'loss' as pertaining to the *right* of property. Such is the view of the authorities quoted.—The punishment 'like a thief', under this view, is meant for one who misappropriates the property of minors and others.

130. There are exceptions to the above rule : Adverse possession does not lead to loss in the case of Deposits, Boundaries, Pledges, Sealed Deposits, or in that of the property of idiots, minors, kings, women and learned Brāhmaṇas.—(Yājña. 25., Mitā. P. 326; Nārada 4·8, 9 & 10).

Notes.

The reason for this exception lies in the fact that there is justification for the real owner not asserting his right. For instance, in the case of Deposits, as the man who has received the deposit, is entitled on that very account, to its enjoyment,—the owner, the Depositor, finds no reason to object to it ;—in the case of Pledges and Sealed Deposits, even though enjoyment is not permitted, yet the owner may not interfere, feeling secure under the law that in the event of the pledgee not returning the property intact, he would be entitled to receive from this latter the value of the property along with interest upto date ;—in the case of the property of the idiot and the minor, it is only natural that they are unable to assert their right ;—women are, bytheir very nature, modest, and generally ignorant of their rights ;—the King is too busy with the business of the state to find time to find out and assert his rights over his private property ;—so also the learned Brāhmaṇa is too engrossed in his studies and religious duties to assert his rights over property ;—in the case of Boundaries, the man feels secure under the belief that the boundary-marks are always there to indicate his property.

Medhātithi (on Manu 8.3).—Mere possession does not prove title ; it must be possession for 10 years (Manu 8.147) or 20 years (Yājña. 24.). Manu (8.147) says—'When the owner of the property knows of its being enjoyed by a stranger for 10 years, during which time he does not complain of it either to the man himself or to the King, his right over the property ceases. Medhātithi says that 'stranger' here stands for *any other person*, not, literally, one who is not related to the owner.—In the case of things used with friendly assent, they do not become lost by mere adverse possession (Manu, 8.146).—If the owner is neither an idiot, nor a minor, and his property is enjoyed by another before his eyes, it becomes lost to him by law, and the adverse possessor shall retain that property (148).—But a pledge, boundary, and property of the learned Brāhmaṇa are not lost through adverse possession (149).

131. In cases of misappropriation of the Deposit etc., the misappropriator shall be made to pay to the owner the value of the property, and he shall also pay a fine of equal amount. (Yājña 26, Mitā. P. 329).

Notes.

Or in the cases where the culprit is a rich man he should be made to pay such a fine as would be felt by him and would act as a deterrent ;—on the other hand, if he is a man who is not rich enough to pay a fine equal in amount to the value of the property concerned, the fine may be lower, just enough to make it felt. In cases where the culprit is absolutely penniless, corporal punishment shall be inflicted on him ; or he may be put into prison, or he should be made to make good the requisite amount by work.

## TITLE AND POSSESSION—RELATIVE STRENGTH.

132. *Title* to a property is superior to *Possession*,—'title' arising from Inheritance, Partition, Purchase, *Parigraha* (finding of unclaimed fuel and wood) and *Adhigama* (coming by buried treasure).—(Yājña. 27).

Notes.

According to Vishvarūpa 'Āgama', 'title', stands for *Documentary Evidence*. Title is superior, because for the determining of one's actual right to a property, Possession depends upon title; in fact Possession is legalised by Title, Possession not sanctioned by Title is not legal. Possession, by itself, never producs a proprietory right. (See Nārada 4. 12).

133. Thus the possession that can be admitted as proof is only one (1) which is supported by Title, (2) which has continued uninterruptedly for a long time, (3) which has never been objected to and (4) which has been well known to the other party.

134. In certain cases however Possession is admissible as proof, even when not supported by Title; for instance, when it has continued for three generations. (Of Nārada 4. 16)

Notes.

But all that this means is the absence of the *knowledge* of Title, not the absolute absence of Title. There is a further qualification: Possession as proof is vitiated by the absence of knowledge of Title, only in cases where it has extended over a period of time within the limits of ordinary memory; if it has extended beyond the reach of memory, the absence of the knowledge of title does not vitiate the evidential character of Possession. For instance, uninterrupted Possession during one hundred years or more would establish one's right, even though he can adduce no Title.—But even so, if during all this time there has been a common belief that the man's possession is without Title, the strength of such possession becomes considerably weakend.

135. Title also does not possess full evidential strength, where there is no Possession at all; [because, says Vishvarūpa, it is Possession that validates the Title].

### Notes.

The reason for this lies in the fact that purchase, gift and such other sources of Title, by their very nature, involove some sort of Possession. For instance, the gift of a cow is not complete until the donor has caught hold of its tail.

Nārada declares that 'even when there is documentary proof, and there are witnesses in support,—if there is no Possession, the right is not strong,—specially in the case of immovable property'.

Another explanation (Mitā. P. 351) of the above text of Yājña-valkya( 27) is as follows: Document, Witness, and Possession having been declared to be the three kinds of proof, the text in question proceeds to determine the superiority of these in cases where all three are produced. (a) In the first question, if a Title substantiated by witnesses is produced, it is stronger proof than Possession, ; (b) in a case where the Possession has continued for three generations, and comes to be disputed in the fourth, it is stronger than Title supported by documents ; and (c) during the second and third generations, Title accompained by even some slight Possession is stronger than Title entirely devoid of Possession.

On the relative strength of Title and Possession, Medhātithi has the following remarks—(a) In the absence of Title, if a property has been in the possession of one's three ancestors, it becomes his *own*, irrespectively of 20 years having elapsed or not ;—(b) other texts lay down that in the first generation the only source of ownership of immovable property is Title, in the second, Title *plus* Possession ; and in the third, Possession only ; and here also there is no limit of twenty years:—there are other texts again which deny all ownership on the basis of mere Possession, even though extending over 100 years ; but this applies to the first generation only. The conclusion deduced from all this is that in the first generation there can be no ownership due to mere Possession, even though it extends over many years ; so also for the second generation ; but after that, longstanding ownership does bring about ownership, even though the owner may be unable to prove his Title ; and this for the simple reason that after the lapse of a long time, it becomes impossible to prove Title by means of either documentary or oral evidence. Hence long-standing Possession is taken as justifying the presumption of its being based upon proper Title. It is on this ground alone that Possession has been declared to be a *'proof'* of ownership not its *source*, among which latter are only the following seven—(1) Inheritance, (2) Finding, (1) Purchase, (4) Conquest, (5) Money-lending, (6) Trade and Agriculture and (7) Gifts.—Medhātithi ha.s offered several explanations of the limitation of 'twenty years'

136. When a man has acquired a Title to a certain property,—if his rights are challenged, it is incumbent upon him to prove the Title; by means of documentary and other kinds of evidence d [or according to Vishvarūpa, when the validity of a written document is challenged, the man in whose favour it was executed should prove its validity] ;—if he fails in this, he does not only lose the property but also becomes liable to fine.—(Yājña. 28)

137. If the right is challenged, not during the life-time of the acquirer himself, but during that of his son or grandson,—then it is not necessary for the latter to prove the title ; all that he has to do is to prove Possession undisturbed, unchallenged and continuous ; and he is to be fined only if he fails to prove such possession.

Notes.

But he cannot retain the property any longer, says Vishvarūpa.

138. If the right is challenged in the third generation, it is not necessary for the man to prove the Title, nor to prove that the Possession has been undisturbed or unchallenged ; simple Possession is all that he has got to prove.

## Notes.

And in this case the man may retain the property, says Vishvarūpa.

Such is the sense of Yājñavalkya's text. The Mitākṣarā however alters the entire menanig : It adds that what is meant is that the son or the grandson also loses the property by failing to prove the Title,—the only difference being that while in the case of the acquirer himself, failure to prove the Title renders him liable to fine, there is no such liability incurred in the case of his son or grandson. This view is accepted by the Aparārka also (P. 637).

The Aparārka explains that the present rule applies to cases where Possession has continued 'beyond the *smārta time.*' i. e. 'from times immemorial, out of memory', i. e. "continuing through three generations,' as mentioned in some texts ; or for sixty years, as held by Nārada, who ascribes 20 years to each 'generation' ; and according to this last authority, no 'title' need be enquired into if there has been continued possession for 60 years or more ; up to 60 years, it is time 'within memory', and beyond 60 years it is 'time out of memory'. Having quoted several texts to the effect that the property that has been possessed for three generations cannot be recovered from the possessor, the Aparārka, comes to the conclusion that all that is meant is that after the lapse of 60 (according to others, 100) years, it is ordinarily not possible to prove any flaw in the original title ; but if in any case such flaw does come to be detected, the property must be given up by the possessor, even after 100 years,—on the ground that the flaw in the title vitiate the possession of the first gerneration, and this vitiation affects the possession of the following generations also. The penalty for wrongful possession however is to be inflicted only during the first generation, later generations only lose the property.

139. [Vishvarūpa reads an additional verse which provides a reason for what has gone before]—'It is necessary to prove the title, and even the acquirer's son cannot retain the property, *because it is only by Title that Possession can be legalised* ; and *Possession without Title is illegal*'.

140. If, however, the acquirer of the property happen to die after he has been sued and his Title to the property has been challenged,— and before the suit has been tried and decided,—then it becomes incumbent upon his heirs to prove the Title.—(Yājña. 29).

Notes.

Because in such cases, mere Possession, even though supported by evidence, is not sufficient proof ; for the simple reason that the suit filed has already challenged, and to that extent weakened, the strength of the Possession. (Cf. Nārada 4. 22).

### LEGAL AUTHORITIES.

142. The King shall investigate cases with the help of, and in strict accordance with, *Dharmashāstra* and *Arthashāstra* (Yama) ;—the 'Dharmashāstra' consists of the Four Vedas along with the subsidiary sciences, exegetics and the Smṛtis (Pitāmaha) ; and 'Arthashāstra' is the science that deals with state-craft (Bhaviṣya—Purāṇa).

143. Among Smṛtis the authority of Manu is paramount (Aparārka on Yājña. 21 a).

144. In the trying of cases, only those ordinances of the *Arthashāstra* are to be used which are not repugnant to the former. Those that are so repugnant are to be rejected—(Nārada and Yajñavalkya 21 b.)

145. When there is conflict between two ordinances, the issue is to be determined by means of well—established reasoning (Yājña 21 A).

Notes.

The total neglect of Reasoning or Logic has been condemned by Bṛhaspati. The usefulness of Logic and Reasoning has been emphasised by Manu also. (8.44).

As an example of this conflict among ordinances we have the following :—We find a rule of Political Science declaring that 'the acquistion of a friend being more important than that of land or gold, one should make special efforts to obtain a friend'; on the other hand we have the legal ordinance that 'in investigating cases the King should be free from all hate and love'; now in a certain case it may so happen that by showing a favour to one of the parties the King would obtain in him a useful friend, which advantage he would lose if he dealt with the case strictly according to law. In such a case it is the clear duty of the King to follow the legal ordinance and reject the political maxim.

The above explanation of Yājñavalkya's rule has been criticised by Vishvarūpa, who says that if the text meant as above, then it would be entirely irrelevant in the present context. According to him the meaning is—'When there is conflict between a legal text and what one deduces from the proceedings, then the deduction has to be rejected in favour of the legal text; because deductions are based upon Temporal science which is purely temporal, and Spiritual science (which includes legal texts) is always more authoritative than temporal science.

146. Suits should be tried, not entirely on the basis of Smṛti-law, which is of universal application, but also in accordance with such laws, local, tribal and commercial or social as are not repugnant to Smṛti-law.—(Manu 8.41)

147. In cases where no guidance is afforded by any ordinances, decision should be taken on the basis of such long-standing customs as may not be repugnant to ordinances (Kātyāyana).

148. In cases where both parties belong to the same village or to the same city or to the same communities, the decision is to be on the basis of the local customs; but where the parties belong to different places or communities, the decisions should rest, not upon custom, but upon written texts.

149. In cases of disputes among tradesmen and artisans and Agriculturists and musicians or players,—the King should have the investigation made by those communities themselves.

150. In the private affairs of men, cases are to be investigated by the preceptor or the master or the father or the elder brother or grandfather or the whole family (Vyāsa).

### NOTES.

A too literal application of Law-texts has been deprecated by Manu (8.45), who lays down that in trying suits, the King shall take note of (1) the true facts of the case (which he may deduce from the proceedings, even though they may not have been clearly set forth by the parties);—this is what has been held by Yājñavalkya (2.19) also;—(2) the nature of the case, or the motive of the parties;—(3) himself i. e. he should exercise his own judgment, or have due regard of his own interests;—(4) the character of the witnesses;—(5) the nature of the place and (6) of the time (which affect the importance of the case).

## FACTS.

Yajñavalkya 19

151. What the King and the Court should try to do is to ignore or reject the special pleadings of the parties, and concentrate on the real facts of the case, on the basis whereof cases should be tried (Yājña 19).

### NOTES.

Special efforts are necessary for this; because in law-suits true facts,—if not properly borne in mind—are very often over-clouded or reversed in the course of legal proceedings, which are beset with all sorts of subterfuges and tricks. According to others the meaning of this is that the facts of the case, if not set forth by witnesses, are rendered futile in law-suits, so that the first attempt should be to get at the facts by means of investigation; and the Court should proceed ro examine witnesses ouly in the event of its being found impossible to ascertain the facts by other means.

According to the Aparārka what the text advises is that first of all the Judge shall try to extract the facts from the two parties themselves, before calling evidence. It is only when he fails in getting at the facts from the parties, that he should proceed with the regular trial by calling evidence etc.

## DOCUMENTS, CONTRACTS OR TRANSACTIONS WHEN NULL AND VOID.

152. A contract made by a person intoxicated, or insane, or grievously diseased, or wholly dependent, by an infant or by a very aged man, or by an unauthorised person, is invalid. Manu 8·163—168

153. 'Agreement made contrary to law or to settled usage can have no legal force, even though established by proofs.'

154. 'A fraudulent mortgage, a fraudulent gift or acceptance, and any transaction wherein fraud is detected, shall be declared null and void'.

155. 'Should even a wholly dependent person make a contract for the behoof of his master's family, the master shall not rescind it.'

156. 'What is given by force, what is enjoyed by force, what has been caused to be written by force, and all transactions done by force, Manu has declared void.'

157. Transactions entered into under force or under threat and the like,—even though completed —should be set aside: as also those entered into by women, or at night, or inside the house, or outside the village, or by enemies. Such transactions should be gone through again, under better conditions and more openly, all secrecy being eschewed. Yajnavalkya 31.

158. Transactions entered into by the following persons are not to be entertained (or admitted)—one who is drunk, or insane, or invalid, or in grief, or a minor, or frightened or exiled;—nor a transaction entered into by a person on behalf of another who is neither related to, nor authorised by the latter. Such authorisation is to be made in cases where the party is too shy, idiotic, insane, too old, a woman or an invalid. No such Yajna. 32.

attorney is admissible in serious criminal cases. Persons other than those so authorised, or servants or pupils or relatives are to be fined if they interfere in the proceedings.

Notes.

There are some texts which lay down that no suit can lie between the teacher and pupil, or between father and son, or between husband and wife, or between master and slave. But *Mitākṣarā* holds that what is meant is that in such cases, the King should persuade the plaintiff to wittebass the suit which should be proceeded with if the persuasion fails and the party persists in it;—cases are not rare where such suits have to be filed and it would not be right to rule them out entirely.

Nārada's dictum that 'a suit filed by one person against several persons shall not be admitted' has been taken to preclude the simultaneous trial of several suits filed by one person against several persons with diverse interests.

## LOST PROPERTY—CLAIMS.

159. In the case of the finding by the king or his officers of property lost on the public road or near the Customs House and such places, if the owner comes to claim it, it should be given to him, if he proves his ownership by its description; if he fails to prove it, he should be fined the amount of its value.

Yajnavalkya 33.

Notes.

Such lost property is to be surrendered only if it is claimed within three years of its finding. After the lapse of three years, it becomes escheated to the King (Manu 30).—If the property is claimed within one year of its finding, the whole of it should be surrendered to the owner if he substantiates his claim by correct description of the articles lost—name, form, size, number, place where lost, whence acquired; but if it is claimed during the second or the third year, the King may deduct from it a portion, as fee for the keeping of it; the fee being the *twelfth* part during the second year, and the fourth part during the third year. After the third year also, the King may only make use of the property, and on the owner turning up, it should be returned to him, after deducting the royal fee.—but of the King's share, the fourth part should be given to the person who had found the property.—In the event of no one turning up to claim the property, the whole of it goes to the King, the fourth part being paid to the finder. Manu (8·33) lays down the King's share as the 'sixth' part, or 'tenth' or 'twelfth', according to circumstances.

Medhātithi mentions and rejects the view that what is meant by the property becoming 'escheated' to the King is that he is to have the use of it, and not that he becomes the actual owner.

160. If the claimant fails in substantiating his claim, he is to be fined the amount of the value of the property in question. (Manu 8·32).

### TREASURE—TROVER.

Yajnavalkya 34-35.

161. As regards treasure buried under the ground,—(*a*) if it is found by the King, he shall take half of it, giving half to the Brāhmaṇas (Manu 8·38) ;—(*b*) if it is found by a learned Brāhmaṇa, he should take the whole of it (Manu 8·37) ;—(*c*) if it is found by others [*i. e.* ordinary Brāhmaṇas, not learned], the King should take the sixth part ;—or according to the Aparārka, the King should give one sixth of it to the finder.—If the finder fails to report the finding to the King, and it comes to be known afterwards, he should be made to surrender the whole amount, and should also be fined according to his circumstances.

162. If the owner of the found treasure turns up to claim it,—and he succeeds in substantiating his claim,—the King shall hand it over to him, after deducting the sixth or the twelfth part as the royal share. (Manu 8·35).

163. All underground treasure belongs to the King (Gautama 10·43), but this applies to only that treasure the owner or burier of which is not known—says Medhātithi (Manu 8·35) ;—the reporter of the finding should receive the sixth part ; but this, according to Medhātithi, applies to only those cases in which the *finder* is either the person who had buried the treasure or his direct descendant.

164. If the claim turn out to be false, the claimant shall be fined either the eighth part of his own property or some equitable portion of the finding.

## STOLEN PROPERTY.

165. In cases of theft, the property stolen shall, on recovery, be made over to the owner. If he fails to recover the stolen property, he shall make it good out of his own treasury. Yajnavalkya 36. Manu 8·40.

## COURT OF WARDS.

In connection with the trial of suits, it has been felt by legal writers that some provision must be made for safeguarding the interests of minors and other persons not capable of taking care of themselves. To this end we have—

166. "The King shall protect the property of a minor until he has finished his education, or until he has passed his minority. Manu VIII. 27, 28, 29,

167. "In like manner care must be taken of barren women, of women who have no sons, of women whose family is extinct, of faithful women whose husbands are away or dead, and of women afflicted with diseases.

168. "A righteous King must punish like thieves those relatives who appropriate the property of such females during their life-time."

### DECISION—JUDGMENT.

169. If the plaintiff succeeds in establishing his proofs, he succeeds in his suit and obtains the Decree. If, on the other hand, he fails in establishing his proofs, his suit fails, and he obtains Defeat.

Mita. P. 266

170. Decisions have been classified under four heads: (1)Based on Righteouness, where the defendant has righteously admitted the claim, and which has been further ratified by means of ordeals;—(2) based on legal proceedings, based upon evidence and counter-evidence produced during a regular trial:—(3) based on arguments (dealing with facts, of possession, custom and so forth);—and (4) based upon royal command, in a case where the evidence adduced by both parties has been found to be of equal force, and the Court has been unable to come to decision ; but such royal command should not be such as violates the law or the opinion of the members of the Court.—(Bṛhaspati—Parāsharamādhava P. 150).

171. After the pronouncing of the Judgment, the property under dispute shall be handed over to the winning party, along with the Court's decree in writing.

172. 'In cases where the debtor has denied the debt, if the decision is against him,—he shall be made to pay it to the creditor, and also a fine—in the form of the twentieth part of the claim—to the King'. (Nārada). This has been taken to apply to cases where the debtor is in different circumstances.

173. According to Viṣṇu, the King is to receive the tenth part of the claim from the debtor, as *fine*, and the twentieth

part from the creditor, this latter being meant for maintenance charges of the Court (says Mādhava P. 152).

174. When the plaintiff has claimed a number of things—gold, silver, clothes, and so forth,—and the claim is denied in toto by the defendant,—in course of the trial,—if the plaintiff is able to establish, by the evidence he adduces, his claim to only a few of the things claimed,—i. e. only a part of his claim,—the defendant should be made to repay the entire claim, all the things mentioned in the plaint [along with a fine, adds Vishvarūpa]

Yajnavalky. 20.

Notes.

Because from the fact of a part of the claim having been found true, the natural deduction is that the other parts also are true ;—if the plaintiff is truthful on one point, it follows that he is truthful on other points also; and if the defendant has been found to be untruthful on one point it follows that he is untruthful on othe points also.

This shows that reasoning and deduction also find place in the investigation of law-suits; so that no claim attaches to the Judge if he bases his decision on right deduction, even though such decision be found to be against actual facts (not brought out during the trial). This has been clearly asserted by Gautama (11. 3—24 and 32).

Some law-givers—e. g. Kātyāyana—have held that in a case where the condition can prove only a part of his claim he should receive that part of the claim only.—But this has been held to apply to cases where the son is sued for his father's debts; and the reason for this favour shown to the son lies in the fact that he does not deny the debt, he only says that he knows nothing about the law; and as such he cannot be regarded as a liar, to the same extent as the contractor of the debt himself.

The Aparārka has tried to reconcile the two views by asserting that the rule laid down by Yājñavalkya is meant for those cases where the defendant makes the 'denial' in an arrogant manner, adding 'if the plantiff succeeds in proving the truth of even a little of his claim, I shall pay all that he claims,' and so forth.

In criminal cases, even if a part of the charge is proved, the whole should be regarded as proved. But according to the Aparārka, only that much of the *unproved* charge has to be taken as proved, which is a natural corrollary to what has been proved; e.g. if it is proved that a young man was lying for a whole night with a woman on the same bed, the charge of adultery also should be taken as actually established.

175. In a case where the plaintiff, after having proved his claim, adds that the defendant owes him a few more things, which he had forgotten to include in his claim,—this additional claim cannot be decreed in his favour (Yājña. 20).

### Notes.

Vishvarūpa reads '*likhitaḥ*' (in place of '*likhitam*') and explains (a) to mean 'If the man has been *reported* to the King as having denied the claim of several things etc'. (the rest as above); but the difference in this explanation becomes more marked in regard to (b) which means 'if the man has *not* been *reported* to King, he is to be made to pay only the entire claim, *not the fine*'.

176. Manu (8. 59)—'The debtor who had denied the debt, or the man who had laid a false claim,—should be fined double the amount of the claim.'

177. If the judgment-debtor is unable to pay the amount due, he shall repay the creditor 'by working' for him (Manu 8. 177).

178. But the Brāhmaṇa debtor is to be allowed to repay it by easy instalments (Manu 9. 229).

179. If the man is incapable of doing work, he sholud be put in prison.

## PENALTIES.

( पराशरमाधव P. 155—160.

180. Penalties have been classed under four heads—(1) *Vāgdaṇḍa*, Censure, (2) *Dhigdaṇḍa*, Interjectory Reproach, (3) Monitary, and (4) Corporal.

181. When the offence is a slight one, censure is sufficient ; a minor offence is to be met with Interjectory Reproach—'fie', 'shame' and so forth ; a middling offence is to be met by monetary penalty, fine ; and Disaffection against the King is to be met by Imprisonment, or banishment or death.

### Notes.

Another distinction is this——Friends, elders and priests should be punished with censure, ascetics with Interjectory Reproach, litigants with monetary fine.

182. The Brāhmaṇa is never to suffer capital punishment, for him there is banishment. But according to Mādhava this is meant only for such Brāhmaṇas as have no property.

183. Manu lays down shaving of the head as a substitution for death in the case of the Brāhmaṇa.

## APPEALS.

184. Manu (9·233) lays down the general rule——'Whenever any decision has been arrived at (by the court), or a punishment has been inflicted,—the King shall hold it to be legal, and shall not annul it'.

### Notes.

In this text, we meet with two technical terms '*Tīritam*' and '*Anushiṣṭam*'. These have been translated above according to the explanation given by Medhātithi and other commentators. But according to a definition provided by Kātyāyana, '*Tīritam*' would be 'a claim that has been declared to be just or unjust by the assessors', and '*Anushiṣṭam*' would be 'a claim that has been confirmed by witnesses'. This latter explanation however is confusing. As a *general* rule, what has been stated above is quite reasonable. Exceptions are provided for by Manu in the next verse (234).

185. 'If a case has been dealt with by his Ministers or by the Judge in an illegal manner, the King himself shall reconsider it, inflicting a fine of 100 *Paṇas* on those persons'.

### Notes.

This provides for revision by the King on his own initiative. But other authorities have provided for appeals to be lodged by the parties themselves.

186. In this connection we meet with a gradation of authority among the trying agencies.—According to Yājñavalkya 30, in dealing with law-suits Judges appointed by the King are more authoritative than Village-Communities, which are more authoritative than Trade-guilds, which latter again are more authoritative than *Families* or *Agriculturists* (according to Aparārka). That is to say, if a suit has been decided by the members of the Family, the decision may be appealed against, to the Trade-guild, from whose decision appeal lies with the Village-Community, from whose decision again appeal lies with the King's Court.—The decision of the Court also may, according to Nārada (1·7), be appealed against, to the King himself, who should try the suit with the help of a (Privy) Council consisting of members possessed of qualifications superior to those of the members of the first Court.

187. If the appeal succeeds, the members of the first court as also the decree-holder should be fined double the amount of the claim involved, if the wrong Judgment was due to mistake on the part of the Judge and assessors ; if it was due to the witnesses these latter alone should be fined. If the appeal fails, the appellant shall be fined—adds the Mitākṣarā.

### Notes.

Medhātithi (on Manu 8·2) quotes Nārada (1·8) on the comparative authority of (1) the King, (2) the Judge appointed by the King, (3) *Gaṇa*, 'union' of Builders and other artisans who wander about in groups, in search of work, (4) *Shrēṇī*, Trade-guilds and (5) *Kula*, Family (or according to some, '*Kula*' stands for 'neutral persons'). The Shreṇī or guild consists of members, each one of whom can work individually by himself, while in the *Gaṇa* or union, all the members work together, never singly.

# II.—HISTORY AND BIBLIOGRAPHY OF NYAYA VAIŚEṢIKA LITERATURE.

By Gopi nath Kaviraj.

## THE SCHOOL OF BENGAL.

We have given above a brief account of Pakṣadhara and his immediate successors in Mithilā. But it was Vāsudeva, possibly also Pakṣadhara's pupil, to whom we are indebted for much of the greatness and glory in the Nyāya philosophy of Bengal. Though Vāsudeva may not have been, as I am inclined to think he was not, the earliest exponent of Nyāya in Eastern India (for in addition to Śrīdhara of whom notice has already been taken other writers may have flourished whose works are now lost), yet the fact must be admitted that he was one of its most powerful champions, and that except for his fostering care this philosophy could not have lived to develop into its present state of perfection. But before proceeding to describe him in detail it would be well to cast a rapid glance at his father.

### I.—Maheśwara Viśārada.

His father, popularly known by his title Viśārada was a Brahman of the Rārhi class, born in a noble family at Vidyānagara in the city of Navadvīpa. He was a scholar of the old type teaching only Law and Grammar in his *tol*, and also perhaps Navya Nyāya which had just come into vogue. From the testimony of Vāsudeva at the end of Sārvabhauma's Commentary on Advaitamakaranda, it may be surmised that he was also a master in the Vedantic lore. Very little is practically known about his life and works. He had two names, both preserved for us in authentic records—viz. Maheśvara and Narahari, of which the former often appears in the Vaiṣṇava literature,* while the latter is mentioned only once by his son in the Commentary on Advaita Makaranda†. It cannot now be ascertained whether Viśārada was an author, but I believe that Manuscript No. 240, a Com. on Tattva Chintāmaṇi (1st section), deposited in the Govt. Sanskrit Library Benares and labelled as Pratyakṣamaṇi-Māheśvarī was *his* production. This is avowedly a mere conjecture, with no claim to the stability of an established thesis, but the following considerations, weighed together, would seem to bear this sufficiently out :

(1) Firstly, there are not many scholars named Maheśvara in the history of mediaeval Sanskrit literature possessed of the necessary intellectual equipments. This proposed identification failing, we shall have to fall back on the only other alternative open to us, viz. in favour of the author of the Com. on Kāvyaprakāśa, called Ādarśa or Bhāvārthachintāmaṇi‡. But that would be hardly probable, for the reasons stated below.

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* सार्वभौम पिता विशारद महेश्वर ।
ताहार जाङ्गाले गेल प्रभु विश्वम्भर ॥

चैतन्यभागवत, मध्यखण्ड, २१ अध्याय.

lines 11-12 (Basumati Edition, 1315 Sana, p. 235).

† श्रीवन्द्यान्वय कैरवामृतरुचो वेदान्तविद्यामयाद्
भट्टाचार्यं विशारदान् नरहरे: * * * * ॥

End of Advaita Makaranda ṭīkā.

(*Mitra*, 2854)

‡ Hall (Intro. to Vāsavadattā p. 54) makes the author Maheśvara identical with Śrīvatsalāñchhana. But Peterson (II. p.19) denies this identity, saying that Maheśvara was another name of Subuddhi Miśra for whom he refers to Aufrecht, (Cat. I 716)

(2) Vāsudeva, his brother Vidyāvāchaspati, his son Vāhinīpati, all devoted their time, attention and energies to writing Commentaries on Chintāmaṇi and Āloka with the object immediately of popularising this uesful treatise and ultimately of ousting the glory of the rival School of Mithilā. Thus when the whole family of Vāsudeva is found interesting themselves in studies of Chintāmani it would be unreasonable, unless very cogent grounds exist on the contrary, to suppose Maheśvara to be an exception.

(3) And further, curiously enough, all the above works of the Sārvabhauma family are found *only* in the Sanskrit College Benares ; and so is the case with the Commentary under notice.

Certainly the fact is not without its meaning. By way of an explanatory suggestion I may add here that the works originally belonged to the private Library of Maheśvara Viśārada himself who in his latter days had been staying at Benares* and that when they passed out of his family, under circumstances of which we are not aware, they went together ( perhaps with other works ), were transcribed ( e. g. Vāhinipati's Commentary, dated 1584 A. D. ) and have again come together from their last depository. Maheśvara refers to the view of Pragalbha Miśra on fol. $28b^{11}$ of his Commentary.

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who speaks of Subuddhi Miśra Maheśvara's Com. on Vāmana's Alaṅkāra Sūtra, called Sāhitya Sarvasva. The whole question is involved in obscurity.

Who was this Subuddhi Miśra ? Could he not be the father of Jayānanda (born 1513), the author of Chaitanya Mangala and a famous Vaiṣṇava of the Gauḍiya order ?

* About Mahesvara's migration from Bengal and settlement at Benares, cf. Jayānanda's Chaitanya Maṅgala : विशारद निवास करिला बाराणसीं ।

## II. VĀSUDEVA SĀRVABHAUMA.

Vāsudeva was the son of this Viśārada. Tradition affirms that on the completion of his study of Smriti with his father at home he set out for Mithila to get up the niceties of Nyāya Dialectics from the home of his learning. He read there for several years with Pakshadhara Miśra, among many other books, the standard work of the school, viz. Tattva Chintāmani, and committed the whole of it to memory. It is said that while returning he was subjected by his tutor to a most severe form of ordeal the so-called "pin-ordeal" or "Śalākā Parīkshā" (1) as it is known in Mithilā through which he passed with great credit. As a result of his conspicuous success in this examination the title of Sārvabhauma was conferred upon him. From there Vāsudeva passed on to Benares where he took his lessons in Vedānta, probably with some local Sanyāsin, and thence returned to Navadwīpa and set up a tol of his own. This was the first school of Nyāya in Bengal.

Among the great teachers of Navadwīpa none was so fortunate as Vāsudeva in gaining such an illustrious batch of students. The great religious reformer Śrī Chaitanya Deva to whose name thousands of hearts respond with fervour, love and adoration, the great Raghunāth whose Dīdhiti has been a perennial fount of inspiration to all lovers of philosophy, the great Raghunadan whose famous Smriti compilation (Ashtāvimśati Tattva) still governs the course of orthodox

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1. Aufrecht (Cat. Cat. II. 134) has fallen into an error in making the entry that Vāsudeva Sārvabhauma was the nephew and pupil of his paternal uncle Jayadeva Pakṣadhara, author of a Com. on Chintāmaṇi ! From a glance at p. Vol. III it will appear that the mistake arose from a confusion between Vāsudeva Sārvabhauma and Vāsudeva Miśra.

life in Bengal, and last but not least the great Krishnānanda Āgamavāgiśa who revived the decadent Tāntric literature by his famous compilation (Tantrasāra), were among his pupils. Perhaps Haridāsa, too, the commentator on Kusumāñjali was one of the number.

Of his Nyāya works, of which the number is not known, only one seems to have come down to us. It is a Commentary on Tattva Chintāmaṇi entitled Sārāvalī (Benares Sanskrit Library, Ms. No. 184), in which references to the following authorities are found :

यज्ञपति—fols 45b$^5$, 47a$^3$, 47b$^3$, 93b$^8$, 133b$^6$, 111a$^5$, 170a$^2$,
वर्धमान—fols. 45b$^9$, 133b$^5$ ( लीलावती प्रकाश )
नरसिंह—fol. 53a$^5$
आचार्य सम्मति—fol. 53b$^7$
आचार्यमतं—fol. 161a$^6$
प्रत्यक्षमणि परीक्षा—fol. 154a$^3$
शब्दमणि परीक्षा—fol. 168a$^{8-9}$ ( अधिकस्तु शब्दमणि-परीक्षायामनलसधियां सुलभः )

I assume this book was composed by Vāsudeva during his life at Navadwīpa in the course of his tutorial lectures before his classes. There are two grounds for this assumption :

(1) On this assumption alone can be found, at least a provisional, explanation of the otherwise unintelligible fact of the presence of the work at Benares only. For the explanation consists in the suggestion already hinted that the book might have come up to Benares in company with Viśārada. But if it (i. e. Tattvachintāmaṇi) were composed elsewhere (than at Nadia) its removel to Benares would remain an insoluble mystery.

(2) As far as we are acquainted with Vāsudeva's life we can take it that he left off Nyāya studies with his departure

from his home in Bengal. At Puri he was mostly occupied with Vedantic speculations and was distinguished as an eminent Vedāntic Scholar, to whom Daṇḍins and Sannyāsins approached for instruction. Even if he continued teaching Nyāya there, as the author of Amiya Nimāi Charita (Vol. III. p. 126 : Fourth Edition) asserts, it was only a diversion. His favourite pursuit, till his interview with Chaitanya, was undoubtedly Vedānta.

In his old age Vāsudeva retired to Purī, the holy city of Jagannātha where he enjoyed as long as he lived the patronage of the Gajapati King Pratāparudra Deva of Orissa*. He became the chief Paṇḍit of Prataparudra's Court and the Superintendent of Jagannātha's temple, and his cyclopædic learning in various branches of Sanskrit Literature caused him to be a universal referee in Orissa, especially on points of law, ritual, philosophy and religion*.

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* Pratāparudra was the son of Puruṣottama Deva and grandson of Kapileśvara Deva (See Vidyānātha's प्रतापरुद्रयशोभूषण) and belonged to the solar dynasty (as stated in the Colophon of पथ्यापथ्य विनिश्चय by Viśvanātha Sen). He was the patron of (a) Balabhadra (See Rāma Kṛishṇa Bhaṭṭa's Introduction to his Commentary on Śāstradīpikā).

(b) Viśvanātha Sen (Mitra, 2939).

(c) Sūnṛtavādin (Hultzsch Part I. No. 143, p. 163) and was himself the author of a series of works such as :

(a) Kautuka Chintāmaṇi (written probably after his conversion into Vaiṣṇavism), a work on various kinds of Tāntrika *recipes* (Mitra. 310).

(b) Nirṇaya Saṃgraha.

(c) Prauḍha Pratāpa Mārtaṇḍa (This is an important Smṛti compilation, and was made *really* by Rāma Kṛṣṇa Bhaṭṭa of Benares. A manuscript of this exists in the Sanskrit Library, Benares).

? (d) Saraswatī Vilāsa (Hultzsch, Ch. I. No. 425, p. 79).

About his retirement from Bengal Jayānanda in his Chaitanya Maṅgala records the tradition that it was in consequence of avgeneral panic in Navadvīpa caused by the rumour of an order from the Mahomedan ruler of the province for a wholesale devastation of the Brahman families of the place. It is said that this order for devastation had its origin in the alarm excited by a widely current prophecy about the overthrow of the Moslem power by the Brahmin inhabitants of Navadvīpa. However, on account of the panic Vāsudeva's family left Nadia† and migrated to different parts of the country. Thus we read—

विशारद सुत सार्वभौम भट्टाचार्य ।
स्वयं उत्कले गेल छाडि गौड राज्य ॥
उत्कले प्रतापरुद्र धनुर्मय राजा ।
रत्नसिंहासने सार्वभौमे कैल पूजा ॥
तार भ्राता विद्यावाचस्पति गौडवासी ।
विशारद निवास करिला वाराणसी ॥

"Vāsudeva Sārvabhauma, son of Vicsārada, removed to Orissa, leaving Bengal. The king of Orissa was then the illustrious Pratāparudra, famous for his valour in war. He worshipped the great scholar of Navadwīpa, presenting him with a golden throne. The brother of Sārvabhauma was Vidyāvāchaspati, who remained in Gauḍa and their father

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* Cf. the following statement by Lāldās in his Bhaktamal 145 (21st garland) :

पण्डित गम्भीर सार्वभौम भट्टाचार्य ।
यतेक पुरुषोत्तमे दण्डार आचार्य ॥
सभासद प्रधान श्री प्रताप रुद्रेर ।
व्यव या प्रामाण्य पार स्मृत्यादि शास्त्रेर ॥

(Balai chānd Goswāmin's Edition 1305 San, p. 332).

† Except Vīdyāvāchaspatī on whom see passim.

Vicsarada proceeded to Benares, where he settled." (Translation by D. C. Sen in his "Bengali Language and Literature", p. 476).

Though the picture here drawn might be a bit highly coloured, the fact remains that the Mahomedan oppression was growing daily heavier ; and Vāsudeva retired from the country probably to escape from the whims of an oppressive governor. But it is also possible that Rājā Pratāparudra Deva, the great friend of learning and centre of Hindu culture in Orissa, had actually invited him, with the assurance of a peaceful life (a great temptation in those troubled days !), to settle at his Court.

On his arrival at Puri his pen seems to have been at work on Vedānta. There exists in the Śaṅkara Maṭha, Purī a Ms. (copied in Śaka 1551=1629 A. D. ; Mitra, 2854) of a Commentary by him on Lakṣmīdhara's Advaita Makaranda where in the Colophon the author calls himself **गौड़ाचार्य सार्वभौमभट्टाचार्य** [cf. also verse 2 at the beginning and verse 1 at the end*].

In 1510 Vāsudeva came in touch with Śrī Chaitanya Deva (born 1485) the great Vaiṣṇava apostle of Bengal, and was so much taken by his exalted personality that he felt no scruple in renouncing his cherished convictions. The influence of this prophet of Love fell almost as a magic spell on his life, and the story of his conversion, told at great length in all works of Vaiṣṇava Literature†, a story illustrating the triumph of Faith over Reason, is fraught with an abiding interest for those who are engaged in a special study of the psychology of religious conversions. From a dry philosopher, a rationalist to the core, Vāsudeva came to be a fiirm adherent of the doctrine of Faith. He became an exponent of **लीलावाद** and began to worship Chaitanya as an incarnation of the Divine Principle of Love and Redeeming Grace[1].

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* It is strange that the account of Advaitamakarandaṭīkā as given in Mitra 2854 escaped the notice of Aufrecht, who enters the name of this book not under Vāsudeva, the Sārvabhauma but under another person of the same name (Cat. Cat. I. 567).

† E. g. in Chaitanya Charitāmṛta ( मध्य लीला, Chapter VI), Chaitanya Chandrodaya (Bib. Ind. 1854 ; Act VI), Chaitanya Bhāgavata ( अन्त्य खण्ड Chapter II–III), Bhaktamāla (145, 21st Garland), &c. See also Amiya Nimāi Charita, Vol. III. pp. 125-194.

The following words of Vāsudeva's confession before Chaitanya will show that his conversion was not merely an intellectual assent to a creed, but an out and out regeneration of the soul. His attitude towards his young master will also be evident from these words :

**जगत् तारिले प्रभु सेह अल्पकार्य ।**
**आमा उद्धारिले तुमि ए शक्ति आश्चर्य ॥**
**तर्कशास्त्रे जड़ आमि यैछे लौहपिण्ड ।**
**आमा द्रवाइले तुमि प्रताप प्रचण्ड ॥**

**चैतन्यचरितामृत**
(Vasumatī Ed. p. 126)

Henceforward, Vāsudeva was a Vaiṣṇava of the truest type. He was no longer a philosopher moving in the circle of dead reasoning. All his writings breathe of the sweet spirit of meekness and resignation, and display a luxuriant delight in simplicity and ease. He composed a number of stotras in praise of the three brother-prophets of Bengal–

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* Cf. the following verses of Sārvabhauma

वैराग्यविद्या निजभक्ति योग-
शिक्षार्थमेकः पुरुषः पुराणः ।
श्रीकृष्णचैतन्यशरीरधारी
कृपाम्बुधिर्यस्तमहं प्रपद्ये ॥ १ ॥
कालान्नष्टं भक्तियोगं निजं यः
प्रादुष्कर्तुं कृष्णचैतन्यनामा ।
आविर्भूतस्तस्य पादारविन्दे
गाढं गाढं लीयतां चित्तभृङ्गः ॥ २ ॥

Chaitanya Chandrodaya,
(by Karṇapūra, Act VI, Bibl. Ind., pp. 156-7).

(1) Chaitanya, (2) Nityānanda and (3) Advaita.

( 1 )

( a ) गौराङ्ग शतनाम ( Śāstrī, Vol. I. 103, p. 96 ) *
?=चैतन्य शतक (Nadiyā Kāhinī, p. 211 )

( b ) चैतन्यद्वादशनामस्तोत्र

( 2 ) नित्यानन्दनामाष्टोत्तरशत

( 3 ) अद्वैताष्टक ( Cat. Cat. I. p. 10b )

Jayānanda, in the first section of his Chaitanya Maṅgala, attributes a biography of Chaitanya, named चैतन्यचरित्र to authorship of Sārvabhauma Bhaṭṭāchārya (See Sāhitya Pariṣat Patrikā, Vol. IV, pp 201-2), but nothing further is known about this book. In the family Library of Pandit Dāmodaralal Goswāmī I inspected a Ms of Tattvadīpikā, a short Vaiṣṇva treatise of great interest, attributed to one Sārvabhauma Bhaṭṭāchārya, and I am disposed to think that this is another work of Vāsudeva.

### III.—RATNĀKARA.

Ratnākara Vidyāvāchaspati, Vāsudeva's younger brother, was left alone at Navadvīpa in those troubled times. He stayed at home, teaching pupils in his family tol of Vidyānagara. Like his father and elder brother he was a good Naiyāyika. His Commentary on Tattva Chintāmaṇi and Āloka (combined) exists in the Government Sanskrit Library,

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* Perhaps it is to this work that Bṛndāvana Dāsa refers in his Chaitanya Bhāgavata thus—

एइ मत सार्वभौम शतश्लोक करि ।
काकु करे चैतन्येर पादपद्म धरि ॥ ( Vasumatī Ed., p. 307 )

Benares (Ms. No. 372). From the Colophon of Bhramaradūta, a lyrical poem by his grandson Rudra Nyāyavāchaspati, Vidyā Vāchaspati appears to have been the Court pandit of the king of Gauḍa*. He became a devoted follower of Śrī Chaitanya's School and his name is mentioned with honour in Vaiṣṇava literature†. Chaitanya is said to have lived in seclusion for some time in his house.

### IV.—VĀHINIPATI.

Vāsudeva's son Janeśvara Vāhinīpati Mahāpātra was also a student of Nyāya; and his commentary on Āloka (S'abda Khaṇḍa), called Uddyota, is to be found in the Library of the Sanskrit College, Benares. As already stated the work is *known* to exist only in this Library; but since the Ms. here bears (on fol. 52a) Saṃvat 1642 (1585 A. D.) as the year of its transcription‡, the copy was certainly of a much later date than the time of the author, and I consider it probable that earlier copies of the work are still extant§.

The Manuscript, at any rate the section of which we are in possession here, does not make it clear how Vāhinīpati was related to Sārvabhauma or what his real name was. But tradition in Bengal has it that (a) his name was Janeśvara and that (b) he was Sārvabhauma's son. And this tradition may not be altogether baseless.

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* योऽभूद् गौड़क्षितिपतिशिखारत्नघृष्टाङ्घ्रिरेणु-
विद्यावाचस्पतिरितिजगद्गीतकीर्त्तिप्रपञ्चः ।

† As in Chaitanyabhāgavata (अन्त्यखण्ड, Chapter 3):

सार्वभौमभ्राता विद्यावाचस्पति नाम ।
शान्त दान्त धर्मशील महाभाग्यवान ॥

(Vasumatī Ed., p. 312).

‡ From the words श्री कालभैरवायनमः at the close it appears that the transcription was made at *Benares.*

§ This is on the analogy of the other works of the Sārvabhauma family noticed above which I take to be contemporaneous with the authors and belonging to Viśārada's private Library at Benares. However, I must not insist on this point.

(a) That his name was Janeśvara would seem likely. In Chaitanya Chandrodaya (Act VI) we find Chandaneśvara to be the name of one of Sārvabhauma's sons. The name Janeśvara is very similar both ending in the form "Īśvara"; and though this similarity in itself is not of great importance in determining a point of a historical character it has doubtless a corroborative value. Brothers are generally named alike.

(b) His homage to Vāsudeva Sārvabhauma in the beginning of his commentary indicates plainly that he was his pupil, but there is nothing to stand against the suggestion that he was *also* his son. On the other hand, his constant references to **पितृचरणाः** as on fols $3a^{8-9}$, $4a^{5-6}$ &c. and expressions like **इत्यस्माकं पैतृकः पन्थाः** must be understood as allusive to Sārvabhauma. Evidently we are here in the pre-Dīdhitian age, and who among the Bengalis of that day could be described as the leader of a school of Nyāya thought (implied in the word **पन्था**), except the great Sārvabhauma himself?

(c) The title **वाहिनीपति महापात्र** was an honour of distinction in Orissa (cf. the name Ṫapana Mahāpātra). But this does not militate against his Bengali descent. It shows simply that he was holding an eminent position in Orissa and that the honour was conferred upon him by the local king, probably Rājā Pratāpa Rudra himself, in recognition of his merits. However, the Colophon of the Manuscript under review, in prefixing the word **भट्टाचार्य**, to his name, clears up the whole question and supplies positive evidence in favour of his Bengali parentage*.

(*To be continued.*)

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* Vide, fol. 52a: इति श्रीमहामहोपाध्यायभट्टाचार्यश्रीमद्वाहिनीपति-महापात्रविरचितः पद्मालोकोद्द्योतः परिपूर्णः &c.

## III—ANALYSIS OF THE CONTENTS OF THE ṚGVEDA—PRĀTIŚĀKHYA

BY MANGAL DEVA SHASTRI

In my Introduction to the Ṛgveda-Prātiśākhya I have shown that the Prātiśākhya as a whole cannot be the work of one and the same author, and consequently parts of the same are later accretions. In giving the following analysis of the contents of the Prātiśākhya, however, the whole work, together with the ten introductory stanzas, is treated as a unit, without taking into consideration the conclusion referred to above.

The contents of the Prātiśākhya may be systematized, under seven main heads as follows :—

### I. Introductory and Explanatory.

*1. Introductory matter contained in the ten introductory stanzas :*

Obeisance to the deity and the nature of the intended work, stanza 1 ; a mystic description of the three kinds of vedic texts, i.e. Saṁhitā, Pada and Krama. stanzas 2—4 ; requirements of a vedic scholar and the scope of the treatise, stanzas 5—8; enumeration of alphabetic sounds, stanzas 9—10

*2. Definition of terms :*

**समानाक्षर,** I. 1 ; **सन्ध्यक्षर,** I. 2 ; **स्वर,** I. 3 ; **व्यञ्जन,** I. 6 ; **स्पर्श,** I. 7 ; **अन्तःस्था,** I. 9 ; **ऊष्मन्,** I. 10 ; **अघोष,** I. 11 ; **सोष्मन्,** I. 13 ; **अनुनासिक,** I. 14 ; **ह्रस्व,** I. 17 ; **दीर्घ** I. 18 ; **अक्षर** (a syllable), I. 19, XVIII. 32 ; **गुरु,** I. 20, 21, XVIII. 37, 41 ; **गरीयस्,** XVIII. 42 ; **लघु,** XVIII. 38, 39, 43 ; **लघीयस्,** XVIII. 44 ; **रक्त** (a nasal sound), I. 36 ; **संयोग,** I. 37, XVIII. 40 ; **नासिक्य** (a nose-sound), I, 48 ; **स्थान** I. 49 ; **नामिन्,** I. 65 ; **प्रगृह्य,** I. 68—75 ; **रेफिन्** (rhotacised), I. 76 – 103 ; **संहिता,** II. 2 ; **विवृत्ति** (hiatus), II. 3 ; **द्विषन्धि,** II. 80 ; **ध्रुव,** VI. 39-42; **प्लुति,** VII. 2—4 ; **क्रम,** X. 1, 2, XI. 1 ; **उपस्थित,** X. 12, XI.

29 ; स्थित or स्थिति, X. 13, XI. 28 ; स्थितोपस्थित, X. 14 ; XI. 30 ; श्वास, नाद, XIII. 1 ; करण, XIII. 8 ; समापाद्य, XIII. 31 ; दोष, XIV. 1 ; प्रश्न, XV. 23—30, XVIII. 58 ; अध्याय, XV. 31, XVIII. 58.

### 3. *Interpretation aud application of rules :*

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## II. Phonetic.

### 1. *Classification of alphabetic sounds* :—

Eight monophthongs ( *a*, *ā*, *ṛ*, *ṝ*, *i*, *ī*, *u*, *ū* ), I. 1; the vowel *ḷ*, XIII. 35; four diphthongs ( *e*, *o*, *ai*, *au* ), I. 2; twelve vowels (both monophthongs and diphthongs together), I. 3; short and long vowels, I. 17, 18; Anusvāra is either a consonant or a vowel, I. 5; the remaining consonants, I. 6.—Mutes or contact consonants, I. 7; in five classes of five each; I. 8; four semi-vowels, I. 9; eight breathings ( *h*, *ś*, *ṣ*, *s*, *ḥ*, *ẖ* or Jihvāmūlīya, *ḫ* or Upadhmānīya, and *ṁ* or Anusvāra), I. 10.—Surd consonants, I. 11, 12.—Aspirates, I. 13.—Nasal consonants, I. 14.

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### 5. *Syllabication* :

Division of syllables, I. 22—26, 32, XVIII. 32—36.

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[1] वैवृत्त, तैरोव्यञ्जन, क्षैप्र. अभिनिहित. and प्रश्लिष्ट ।

### 6. *Qualities, tones and modes of utterance*:

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[1] मन्द्र, मध्यम, and उत्तम ।

[2] विलम्बिता, मध्यमा and द्रुता ।

[3] References under this head are to Paṭala XIV unless otherwise specified.

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The seven metres of Prajāpati and the number of syllables in each of them, XVI. 1, 2 ; the seven metres of the Devas and the number of syllables in each of them, XVI. 3, 5; those of the Asuras and the number of their syllables, XVI. 4, 6.—The metres of the Yajus, Sāman, Ṛc and Brahman and the number of their syllables, XVI. 10—13.

*The Ṛṣi metres :*

Construction of the Ṛṣi metres, XVI. 7—9 ; three classes of the same, XVI. 14.—Gāyatrī and its varieties (पदपङ्क्ति, भुरिक्पदपङ्क्ति, विराज् or पादनिचृत्, अतिनिचृत्, वर्धमाना, द्विपदा, यवमध्या, उष्णिग्गर्भा), XVI. 16—28 ; Uṣṇih and its varieties (पुरउष्णिह्, ककुभ्, ककुब्न्यङ्कुशिरा निचृत्, पिपीलिकमध्या, तनुशिरा, अनुष्टुब्गर्भा), XVI. 29—36 ; Anuṣṭubh and its varieties (कृति, पिपीलिकमध्यमा, काविराज्, नष्टरूपा, विराज्, महापदपङ्क्ति), XVI. 37—44 ; Bṛhatî and its varieties (पुरस्ताद्बृहती, उपरिष्टाद्बृहती, न्यङ्कुसारिणी or स्कन्धोग्रीवी or उरोबृहती, विराडूर्ध्वबृहती, विष्टारबृहती, पिपीलिकमध्यमा, विषमपदा), XVI. 45—53 ; Paṅkti and its varieties (विराज्, सतोबृहती, विपरीता सतोबृहती, आस्तारपङ्क्ति, प्रस्तारपङ्क्ति, संस्तारपङ्क्ति, पिष्टारपङ्क्ति), XVI. 54—63 ; Triṣṭubh and its varieties (उपजगती, अभिसारिणी, विराट्स्थाना, विराट्पूर्वा or पङ्क्त्युत्तरा, विराड्रूपा, ज्योतिष्मती, महाबृहती, यवमध्या), XVI. 64—73 ; Jagatī and its varieties (महापङ्क्ति, महासतोबृहती), XVI. 74—78.—Two classes of the Atichandases or long metres, XVI. 79 ; The first class (अतिजगती, शक्वरी, अतिशक्वरी, अष्टि, अत्यष्टि, धृति, अतिधृति), XVI. 80—87 ; The second class (कृति, प्रकृति, आकृति, विकृति, संकृति, अभिकृति; उत्कृति), XVI. 88—92.

Designation of stanzas having one or more syllables in excess or otherwise (निचृत्. भुरिज, राज्, विराज्, स्वराज्, सम्राज्, स्ववशिनी, परमेष्ठिन्, प्रतिष्ठा, प्रत्न, अमृत, वृषन्, शुक्र, जीव, पयस्, तृप्त, अर्णस्, अंश, अम्भस्, अम्बु, वारि, अप्, उदक), XVII. 1—5 ; divinities of metres, XVII. 6—12 ; distribution of metres according to colour, XVII. 13—18 ; five additional metres (मा, प्रमा, प्रतिमा, उपमा, संमा,) and their Virājes (हर्षीका, सर्षीका, मर्षीका, सर्वमात्रा, विराट्कामा), XVII. 19,20.—

Principle of determining the metre of complicated stanzas, XVII. 21.—Restoration of the requisite number of syllables in incomplete Pādas, XVII. 22, 23, VIII. 40 ; method of ascertaining the length of Pādas, XVII. 24—40, 44, 45 ; Ekapadā and Dvipadā stanzas, XVII. 41—43, 50.—The longest and shortest (of those having many Pādas) stanzas in the Ṛgveda, XVII. 46—49.

Pragāthas or strophic metres, XVIII. 1—31.—Definition of a syllable, XVIII. 32 ; division of syllables, XVIII. 32—36 ; light and heavy syllables, XVIII. 37—44.—Mutual relation of different metres as regards their number of syllables, XVIII. 45.—Pauses in the recitation of different stanzas, XVIII. 46—57.—Glorification of Triṣṭubh, Jagatī and of the knowledge of metres in general, XVIII. 59—62.

VI. Method of Teaching the Recitation of Veda :

Position of the teacher, XV. 1 ; do. of the pupils, XV. 2, 3 ; mode of addressing the teacher by the pupils, XV. 4 ; glorification and the mode of utterance of Om, XV. 5—7 ; method to be followed in teaching the recitation, XV. 5, 8—22, 32, 33 ; requisite number of stanzas in a Praśna, XV. 23—30, XVIII. 58 ; do. of Praśnas in an Adhyāya, XV. 31, XVIII. 58.

VII. Miscellaneous Matter :

The vowel ḷ does not occur as final nor as initial, introductory stanza 9 ; different views on the nature of a final mute other than a nasal, I. 15, 16 ; three cases of prolated vowels occurring in the Ṛgveda, I. 31 ; list of instances of hiatus within a word, II. 13 ; a few cases of nasalized vowels in the Pada text, IV. 81, 82 ; cases where a long or a short vowel precedes an Anusvāra in the interior of words, XIII. 22—29 ; cases of restoration of Visarjanīya in compound words without an Avagraha in the Pada text, XIII. 30, 31 ; sounds which cannot occur as finals, XII. 1 ; do. do. as initials, XII. 2; consonants which are not compatible in the interior of words, XII. 3—16; definition and description of the parts of speech (**नाम, आख्यात, उपसर्ग** and **निपात**), XII. 17—26.

### GENERAL REMARKS.

It will appear from the list of technical terms, given above, that this Prātiśākhya is singulary free from the use of such artificial or algebraic terms (like **घु, घ, सिम्**) as are found in works like the Aṣṭādhyāyī or the Vājasaneyi-Prātiśākhya; nor does it take trouble to explain the meaning of such common suffixes as **कार** in **अकार** etc. or **एफ** in **रेफ**, or of words like **अपृक्त, उपधा** whose meaning is clear of itself. At the same time there are several technical terms used in the Prātiśākhya whose meaning is not clear without the aid of the commentary. Instances of such terms are: **पद्य** (I. 61), **विग्रह** (IV. 42), **विक्रम** (VI. 1), **विच्छेद** (VI. 47), **परिग्रह** (III. 23), **समय** (X. 19.)

There is another fact also which must be noted in this connection. Ordinarily speaking only those technical terms are defined in a work which are again used in the body of that work. But strangely enough there are many technical terms which, though defined, are never again used in the Prātiśākhya. Instances of such terms will be found among the names assigned to different kinds of Sandhis noted below.

There is a great historical value of the section on the faults of pronunciation. Many of the faults can be taken as indicative of particular tendencies of the speakers contemporary with the author—tendencies which must have really brought about the corresponding phonetic changes in the contemporary Prakrits.

There are several phenomena of euphonic combination, such as **यम, क्रम, अभिनिधान, स्वरभक्ति** which should rather have been given under the head 'Phonetic'. They are not particularly confined to the Saṁhitā text. But I have preferred to follow the author in giving them under the heading 'Euphonic Combination.'

The classification of Sandhis adopted by me is different from that followed by the author of the Prātiśākhya. Broadly speaking the order followed in the Prātiśākhya is as follows :—

(1) euphonic combination of a vowel and a following consonant, (Paṭala II) ;

(2) euphonic combination of a consonant and a following vowel, (Paṭala II) ;

(3) euphonic combination of a vowel followed by a vowel (Paṭala II) ;

(4) euphonic combination of a consonant followed by a consonant (Paṭala IV)[1] ;

(5) cerebralization or नति (Paṭala V) ;

(6) treatment of conjunct consonants or क्रम, अभिनिधान, यम and स्वरभक्ति (Paṭala VI) ;

(7) prosodial lengthening or सामवश सन्धि (Paṭala VII—IX).

As I have stated elsewhere, one special feature of the Prātiśākhya is that almost every phenomenon of euphonic combination is called by a technical name, though several of these names are never again used in the Prātiśākhya. The following technical names are given to the euphonic combinations noted against them :—

अनुलोम अन्वक्षरसंधि (II. 8, IV. 83) = a vowel, or सः, or स्यः, or एषः, or ई (for ईम्) & a consonant ;

प्रतिलोम अन्वक्षर संधि (II. 9) = a consonant & a vowel ;

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[1] Cp. Uvaṭa on IV. 1.

**विवृत्ति** (II. 3) = hiatus in general ;

**दीर्घ विवृत्ति** (II, 79) = a hiatus which has at least a long vowel ;

**द्विषंधि विवृत्ति** (II. 80) = hiatus which has a vowel on both sides of an intermediate vowel ;

**अन्तःपद विवृत्ति** (II. 13) = hiatus in the interior of words ;

**पदवृत्ति** (II. 26) = *āḥ* + a vowel > *ā* + a vowel,
*ai* or *au* + a vowel > *ā* + a vowel ;

**उद्ग्राह** (II. 29) = *aḥ* + a vowel > *a* + a vowel,
*e* or *o* + a vowel > *a* + a vowel ;

**उद्ग्राह पदवृत्ति** (II. 30) = an **उद्ग्राह संधि** with a long following vowel ;

**उद्ग्राहवत्** (II. 32) = *a* or *ā* + *r* > *a* + *r* ;

**पञ्चालपदवृत्ति** (II. 33) = *aḥ* or *o* + *a* > *o* + *a* ;

**प्राच्यपदवृत्ति** (II. 33) = *e* + *a* > *e* + *a* ;

**प्रगृहीतपदा** (**विवृत्ति** or **संहिता**, II. 54) = a Pragṛhya vowel + a vowel ;

**प्लुतोपधा** (**विवृत्ति** or **संहिता**, II. 66) = a hiatus in which the preceding vowel is lengthened ;

**अनुनासिकोपधा विवृत्ति** (II. 67) = a hiatus in which the preceding vowel is nasalized ;

**प्रश्लिष्ट** (II. 20) = contraction of two homogeneous simple vowels into one long vowel,

*a* or *ā* + *i* or *ī* > *e*,
*a* or *ā* + *u* or *ū* > *o*,
*a* or *ā* + *o* or *au* > *au*,
*a* or *ā* + *e* or *ai* > *ai* ;

**क्षैप्र** (II. 23) = semivowel instead of a vowel before a vowel ;

**भुग्न** (II. 31) = *av* instead of *o* and *āv* instead of *au* before a non-labial vowel ;

**अभिनिहित** (II. 34) = *e* + *a* > *e*,
= *o* + *a* > *o* ;

**अनानुपूर्व्य संहिता** (II. 78) = combination not according to the sequence of words in the Pada text ;

**अवशंगम आस्थापित** (IV. 1) = mere combination of mutes + consonants without any change ;

**वशंगम** (**आस्थापित**, IV. 14) = combination of a mute + a consonant ;

**परिपन्न** (IV. 15) = Anusvāra for *m* before *r* and breathings ;

**अन्तःपात** (IV. 19) = insertion of *k* or *t* or *c* between two consonants ;

**नियत** (IV. 26, 30) = *ā* for *āḥ* before a sonant consonant, lengthening of a short vowel after the loss of Visarjanīya before *r* ;

**प्रश्रित** (IV. 26) = *o* for *aḥ* before a sonant consonant ;

**अकाम** (IV. 30) = loss of Visarjanīya before *r* ;

**रेफसंधि** (IV. 27) = *r* instead of Visarjanīya before a vowel or a sonant consonant ;

**व्यापन्न ऊष्मसंधि** (IV. 35) = assimilation of Visarjanīya to the following voiceless mute or breathing ;

**विक्रान्त ऊष्मसंधि** (IV. 35, IV. 78) = non-assimilation of Visarjanīya before a voiceless mute or breathing ;

**अन्वक्षर वक्त्रसंधि** (IV. 37) = loss of Visarjanīya before a breathing followed by a voiceless consonant ;

**उपाचरित** (IV. 41) = *s* or *ṣ* for Visarjaniya before *k* or *p* ;

**आन्पदा पदवृत्ति** (IV. 67) = *ān* + a vowel > *ā̃* + a vowel ;

**विवृत्त्यभिप्राय** (IV. 68) = *ā̃* for *ân* before a semivowel ;

**स्पर्शरेफसंधि** (IV. 72) = *ī̃r*, *ū̃r*, and *ṝ̃r* for *īn*, *ūn* and *ṝn* respectively before a few words and vowels ;

**स्पर्शोष्मसंधि** (IV. 77) = nasalization of the preceding long vowel and addition of *ś*, instead of a long vowel + *n*, before *c*, *ā̃s* for *ān* and *ā̃s* for *an* before *t*,

*r̥̄̃ḥ* for *r̥̄n* and *ā̃ḥ* for *ān* before *p*;

**शौङ्खाक्षर** (IV. 89) = additions of *ś*, *ṣ*, *s* and *r* in certain words;

**नति** (V. 61) = cerebralization of a dental;

**क्रम** (VI. 1) = doubling of a consonant;

**अभिनिधान** (VI. 17) = holding apart of a consonant and suppression of its sound;

**यम** (VI. 29) = 'twins' of non-nasal mutes before nasal mutes;

**स्वरभक्ति** (VI. 46) = a vowel-part;

**सामवश** (VII. 1) = prosodial lengthening of vowels.

Finally it would be of interest to give here also a list of the authorities quoted in the Prātiśākhya:—

**अन्ये**, XVII. 43.
**अपरे**, VI. 51, XI. 6, 14, 20, 58, 59.
**आगस्त्य**, introd. stanza 2.
**आचार्याः**, I. 63.
**आन्यतरेय**, III. 22.
**एके**, I. 46, III. 22, 27, IV. 16, VI. 27, 50, 52, 54, 55, XIII. 12, 14, 15, 19, 32, 38, XV. 33, XVIII. 57.
**केचित्**, I. 40, III. 20, XVII. 43.
**गार्ग्य**, I. 15, VI. 36, XI. 17, 26, XIII. 31.
**पञ्चाल** (?), II. 33, 81.
**पूर्वैः**, X. 17.
**पूर्वनिमित्तमानिनः**, XI. 11.
**प्राच्य** (?), II. 33, 81.
**बाभ्रव्य (क्रमप्रवक्ता)**, XI. 65.
**माक्षव्य** (or **माण्डव्य**), introd. stanza 2.
**माण्डूकेय**, introd. stanza 2, III. 14.
**यास्क**, XVII. 42.
**वेदमित्र (आचार्य)**, I. 51.

**व्याडि**, III. 23, 28, VI. 43, XIII. 31, 37.
**शाकटायन**, I. 16, XIII. 39.
**शाकलाः**, I. 65, XI. 61 ; **शाकलैः**, XI. 19.
**शाकल** (=teaching of **शाकल्य**), I. 75, VI. 14,20,24,27, XI. 21.
**शाकल्य**, III. 13, 22, IV. 13, XIII. 31.
**शाकल्य (स्थविर)**, II. 81.
**शाकल्यपितुः**, IV. 4.
**शाब्दाः**, XII. 17.
**शूरवीर** (and his **सुतः** or **सुताः**), introd. stanza 3.

# IV—GAṆITA-KAUMUDI

OF

# NARAYAṆA PAṆḌITA,

## *A Mathematician of the Fourteenth Century.*

BY

PADMĀKARA DVIVEDI.

## A

## DESCRIPTION OF THE MANUSCRIPT.

The names of Gaṇita-kaumudī or Gaṇitapāṭī-Kaumudī, a work on Arithmetic, composed in 1356 A. D., and of its author, Nārāyaṇa Paṇḍita, son of Narasinha or Nṛisinha, are not unfamiliar to Researchers in Indian Mathematical Manuscripts. Among European Reseachers, Mr. Colebrooke[1] was the first, who revealed the existence of the incomplete manuscript of Nārāyaṇa's Gaṇita-kaumudī. Gaṇeśa Daivajña (born in 1507 A. D), son of Keśava, inhabitant of Nandigrāma in Kristna District, has also mentioned the name of the author in his commentary, called Buddhivilāsinī, composed in 1546 A. D., on Bhāskara's Līlāvatī, a treatise on Arithmetic. Therein he writes: " श्रीधरनारायणादिभिरपि भाण्डजात्यादिकमन्यदप्युक्तं वास्तवं तु मिश्रादीनां त्रैराशिकैकगम्यत्वेन त्रैराशिकमेव पाटी । "

This incomplete manuscript was described as containing only the last two chapters (Vyavahāras XIII and XIV) on Combination (Aṅkapāśa) and Magic Squares (Bhadragaṇita) respectively.

In the Libraries of the India Office, London, and Cambridge, this incomplete manuscript containing only the last two chapters is preserved, 596 B and 77 respectively.

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[1] Colebrooke, Algebra of the Hindus, p. 113, foot note.

Now I should like to reveal to the public, the existence of the complete manuscript of Gaṇita-kaumudī with me. In evidence of this I must request the learned readers, interested in the subject, first to pay their attention to my suggestions in the reading of the portions of Chapters XIII and XIV, which are found printed in the Catalogue of Sanskrit Manuscripts in the Library of the India Office, London, Part V, page 1023.

As printed in the Catalogue, Chapter XIII begins :—

अथ गणकानन्दकरं संक्षेपादंकपाशकं वक्ष्ये ।
नियतं नियतं मत्सरवन्तो दुष्टाः कुगणका ये ॥

The second half of the Śloka is grammatically wrong, for there is no verb to the noun कुगणकाः, and the word नियतं repeated twice, has no such meaning as to connect or clear the sense of the Śloka. Here I may say that the copyist, while copying from some older manuscript, misunderstood प for य in the first नियतं and ति for नि in the second, as there are slight differences between their shapes and little when written with indifferent rapidity, and did पदच्छेद wrongly by taking over ति from the first and connecting it to the second word यतं which should be यत्र. Hence, instead of the reading नियतं नियतं I would suggest निपतन्ति यत्र, so that the correct reading of the above-mentioned Śloka, after emendations, is

अथ गणकानन्दकरं संक्षेपादङ्कपाशकं वक्ष्ये ।
निपतन्ति यत्र मत्सरवन्तो दुष्टाः कुगणका ये ॥

By these emendations, the learned readers will see that the purport of the Śloka becomes clear.

As printed in the Catalogue, Chapter XIV begins :

त्रिभुवनगुरुणोपदिष्टमीशेन माणिभद्राय ( ! ) ।
कौतुकिने भूपाय श्रेढीसंबंधि सद्गणितम् ॥

Generally the work has been written by Nārāyaṇa Paṇḍita in Ārya meter. As a rule[2], an Āryā Chhandas has twelve

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2. यस्याः प्रथमे पादे द्वादशमात्रास्तथा तृतीयेऽपि । अष्टादश द्वितीये चतुर्थके पंचदश सार्या ।

mātrās in its first and third feet and eighteen and fifteen mātrās in the second and fourth respectively. The abovementioned Śloka seems to be in Āryā Chhanda, because its third foot कौतुकिने भूपाय contains twelve mātrās, य being long[3] having preceded a संयुक्त वर्ण, and its fourth foot—श्रेढीसंवंधि सद्गणितम्—contains fifteen mātrās. Therefore it is concluded that its first and second feet must contain twelve and eighteen mātrās respectively. But on observation, the first line of the Śloka is not found to contain thirty (twelve & eighteen) mātrās. Hence some mātrās are wanting in the first line to make the Śloka an Āryā.

In the manuscript in my possession, Chapter XIV begins :

अथ भुवनत्रयगुरुणोपदिष्टेन माणिभद्राय ।
कौतुकिने भूपाय श्रेढीसंबन्धि सद्गणितम् ॥

In this too, some mātrās are wanting in the first line to make it abide by the rules of an Āryā Chhanda, and there is no verb to the agent गणितम् in the second line. Scrutinising closely Nārāyaṇa's style and usage of words, I should like to have the word अथ for the first word of the Śloka, as for instance the opening Śloka of Chapter XIII begins with the word अथ (अथ गणकानन्दकरं etc. ). Now if we place the word अथ before the reading त्रिभुवनगुरूणोपदिष्टमीशेन माणिभद्राय, even then the first line does not contain thirty mātrās. Comparing these two different readings I may suggest the following reading of the Śloka :

अथ भुवनत्रयगुरुणोपदिष्टमीशेन माणिभद्राय ।
कौतुकिने भूताय श्रेढीसम्बन्धि सद्गणितम् ॥

By this emendation, the noun गणितम् has for its verb उपदिष्टम् and the Śloka becomes an Āryā in its true form.

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3. संयुक्ताद्यं दीर्घं सानुस्वारं विसर्गसंमिश्रम् । विज्ञेयमक्षरं गुरु पादान्तस्थं विकल्पेन ॥

At the end of the first line of the first Śloka of Chapter XIV, there is a mark (!) of doubt, attached just after the word माणिभद्राय as printed in the Catalogue of the India Office Library. In order to clear the meaning of the word I may quote here the Śloka next to the above-mentioned one, from my own manuscript, which does not appear in the Catalogue :

सद्गणितचमत्कृतये यन्त्रविदां प्रीतये कुगणकानाम् ।
गर्वच्छित्यै वक्ष्ये तत्सारं भद्रगणिताख्यम् ॥

In this Śloka the word तत्सारं ( तस्य गणितस्य सारं ) shows that this Gaṇita (Magic Squares) has already been taught before and now the author (Nārāyaṇa Paṇḍita) deals with the substance of that Gaṇita, called Bhadragaṇita. By whom and to whom had this subject been previously taught ? The answer to this question is found embodied in the emended first Śloka, the prose order of which is—अथ भुवनत्रयगुरुणा ईशेन ( शिवेन ) कौतुकिने भूताय ( यक्षाय ) माणिभद्राय श्रेढीसम्बन्धि सद्गणितम् उपदिष्टम्, i. e. this true Gaṇita, related to arithmetical progression, has been taught to Māṇibhadra[4] or Maṇibhadra (a name of the King of Yakṣas) by Īśa (Śiva), tutor of three Bhuvanas. On account of its being taught to Māṇibhadra, this Gaṇita is called after his name as Bhadragaṇita. Just as the Sun taught the science of Astronomy to Maya, Brahmā to his son Vaśiṣtha, Puliśa to Garga, Vaśiṣtha to his son Parāśara and so on, similarly Nārāyaṇa Paṇḍita has mentioned here the tradition that the god Śiva taught this Gaṇita to Māṇibhadra, an interpretation on which there appears to be not a shade of doubt.

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[4] There is no difference between Māṇibhadra and Maṇibhadra. Vide Index to the names in the Māhābharata by the late S. Sorensen, PH. D, page 464 and Sanskrit-English Dictionary by Monier Williams, M. A., pages 731 and 768.

As printed in the Catalogue, Chapter XIV ends :

आसीत् सौजन्यदुग्धांबुधिरवनि सुरश्रेणिमुख्यो जगत्यां
प्रख्यः श्रीकंठपादद्वयनिहितमनाः शारदाया निवासः।
श्रौतस्मार्तार्थवेत्ता सकलगुणनिधिः शिल्पविद्याप्रगल्भः
शास्त्रे शस्त्रे च तर्के प्रचुरतरगतिव (र्वा) दिसिंहो नृसिंहः ॥

In my manuscript the last line runs thus :

शास्त्रे शस्त्रे च तर्के प्रचुरतरगतिः श्रीनृसिंहो नृसिंहः।

I prefer this reading.

The reading of the second Śloka as printed in the Catalogue, is similar to that of the manuscript with me.

The third Śloka printed in the Catalogue runs thus :

यावत्सप्तकुलाचलाः क्षितितलं यावच्च सप्तार्णवाः
यावत्सूर्यमुखा ग्रहाश्च गगनं यावद्ध्रुवस्तारकाः
स्थेयात्तावदियं सदोदितवती श्रीकौमुदी कौमुदी–
पूरः ( पूरैः ) स्वच्छयशःप्रवाहसुभगा नारायणं दोस्कृत ( ! )

Instead of क्षितितलं, गगनं and नारायणं दोस्कृत my manuscript has क्षितितले, गगने and नारायणेन्दो स्तुता respectively. But I may suggest the following reading.

यावत्सप्तकुलाचलाः क्षितितले यावच्च सप्तार्णवाः
यावत्सूर्यमुखा ग्रहाश्च गगने यावद्ध्रुवस्तारकाः।
स्थेयात्तावदियं सदोदितवती श्रीकौमुदी कौमुदी–
पूरस्वच्छयशःप्रवाहसुभगा नारायणेन्दोः स्तुता ॥

The Śloka next to the above mentioned one as printed in the Catalogue runs thus :

नारायणसुधाकरमण्डलोत्थां
चातुर्यसूक्तिरचनामृतबिंदुवृंदीं।
प्रीत्यैव सज्जनचकोरगणाः पिबन्तु
श्रीकौमुदीं मुदित [ – ] कुमुदः सदैतां ॥

The word वृन्दीं in the second line is grammatically wrong, as it is an adjective qualifying the noun श्रीकौमुदीं in number and gender, so it should be वृन्दां, for the feminine form of वृन्द is वृन्दा and not वृन्दी. In the enclosed space the word हृत् should be placed as in my manuscript the last line runs thus : श्रीकौमुदी मुदितहृत्कुमुदः सदैताम् । In fine, both the manuscripts have this Śloka, which fixes the date of the composition of the work—

गजनगरविमितशाके दुर्मुखवर्षे च बाहुले मासि ।
धातृतिथौ कृष्णदले गुरौ समाप्तिं गतं गणितम् ॥

i. e. the Gaṇita (Bhadragaṇita or Gaṇita Kaumudī) is finished on Thursday, 2nd Tithi of the dark half of the month Kārtika in Durmukha Samvatsara, in 1278 Śaka.

## B

## CONTENTS OF THE WORK.

Now it may not be out of place to deal with some of the topics treated in the Gaṇita-kaumudī.

Gaṇita-kaumudī is divided into fourteen chapters, each chapter being called a vyavahāra. The first chapter begins with the following Śloka :—

नत्वेशं गणितार्णववर्धनहेतुं तमोनुदं विमलाम् ।
बहुजनचकोरजीवनसम्पत्तिं गणितकौमुदीं वक्ष्ये ॥

After this, the notational places are mentioned by the very names mentioned in Bhāskara's Līlāvatī, with a little difference in synonyms ; thus for अब्ज $(10)^9$, महापद्म $(10)^{12}$ and जलधिः $(10)^{14}$ Gaṇitakaumudī has सरोज, महासरोज and पारावार respectively.

### (a) THE CLEPSYDRA.

In the terminology relating to money measures, the values of a Dramma (द्रम्म) and Niṣka (निष्क) as given in Gaṇita-kaumudī, differ from those given in the Līlāvatī. Bhāskara writes that 16 Paṇas (पण) make one Dramma and 16 Drammas make one Niṣka or a gold coin, while Nārāyaṇa says[5] that twelva Paṇas make one Dramma and 36 Drammas make one Niṣka.

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[5] नखमितकपर्दिकाभिः काकिण्येका चतसृभिः पणस्ताभिः ।
द्वादशभिस्तैर्द्रम्मः षड्वर्गमितैर्निष्कः ॥

In the terminology relating to the measurement of gold, Nārāyaṇa mentions the name of Tulā (तुला) which is not found in the Līlāvatī and says that one Tula is equal to hundred Palas (पल).

In the terminology relating to the measurement of space, Bhāskara says that four Hastas or cubits make one Daṇḍa (दण्ड) and that two thousand Daṇḍas make one Krosa (क्रोश), while Nārāyaṇa writes "दशकरो भवेद्दण्डः" i.e. ten Karas (or Hastas) make one Daṇḍa and eight hundred Daṇḍas make one Krośa. But here it should be remarked that the number of Hastas in a Krośa is the same according to each author's construction of the Clepsydra.

Nārāyaṇa has mentioned the name of Driṣatkarāngula (दृषत्कराङ्गुल), which is equal to

(length 24 Ang) × (breadth 16 Ang) × (height 16 Ang)

As the number of Angulas in a cubic hand

$$=24 \times 24 \times 24 \text{ (A Hasta}=24\text{ Angulas)},$$

therefore the number of Driṣatkarāngula in a cubic hand

$$=\frac{24 \times 24 \times 24}{24 \times 16 \times 16}=\frac{9}{4}=2\tfrac{1}{4}.$$

Hence Nārāyaṇa writes :

सिद्ध- (24) नृप-(16) भूप-(16) संख्या-
ऽङ्गुलोन्मितैर्दैर्घ्यविस्तरोच्छ्रायैः ।
मानं दृषत्करस्य हि
घनहस्ते द्वौ च साङ्घ्री (2¼) स्तः ।

In the terminology relating to the measurement of grain, Nārāyaṇa writes :

खारी विंशतिकुडवा नृपांशेन पादिका ज्ञेया ।
रसशशिनयन- (216) घनाङ्गुलमितिर्भवेत् पादिकायाश्च ॥

i. e. twenty Kudavas ( कुडव ) make one Khārī ( खारी ); a Pādikā ( पादिका ) should be reckoned as equal to the sixteenth part of a Kudava and there are 216 cubic Angulas in a Pādikā. Now the volume of a Pādikā in cubic Angulas $=216=6^3$

$$\therefore \text{ its volume in cubic Hasta } = \frac{6^3}{24^3} = \frac{1}{4^3} = \frac{1}{64}.$$

The number of a Pādikā in a Khārī $=16 \times 20 = 320$

$\therefore$ the volume of a Khārī in cubic Hasta

$$= \frac{320}{64} = 5.$$

This shows that the Khārī which is mentioned in Gaṇitakaumudī is equal to five times the Māgadha Khārī, mentioned by Bhāskarāchārya in his Līlāvatī, for according to Bhāskara, a cubic Hasta, when used for measuring grain, is called a Māgadhakhārī[6] ( मागधखारी ).

In शून्यपरिकर्म i. e. the operation relating to Zero, Nārāyaṇa writes: "अत्र पाटीगणिते खहरे कृते लोकस्य व्यवहृतौ प्रतीतिर्नास्तीत्यतो खहरो नोक्तः । अस्मदीये बीजगणिते बीजोपयोगित्वात् तत्र खहरः कथीतः". i. e. in this work on Arithmetic, if khahara ( खहर ) is dealt with, the public, in their common business, do not believe in it; therefore khahara is not mentioned here, but as useful to Algebra, I have dealt with it in my Algebra." This gives a clue to the fact that Nārāyaṇa has also composed a work on Algebra before his work on Arithmetic. An incomplete manuscript of this Algebra upto वर्गप्रकृति (Affected square) is in the Princess of Wales Sarasvatī Bhavana Library, Benares, and bears the title of Nārāyaṇīvījam ( नारायणीवीजम् ).

I do not know, how, in Gaṇakataraṅgiṇī by my revered father (the late Mahāmahopādhāya Pandit Sudhākara Dvivedi), this Algebra was supposed to be composed by another mathematician named Nārāyaṇa (flourished in 1588 A. D.), son of Govinda and tutor of Muniśvara, when in the 22nd page of the same incomplete manuscript, there is written : श्रीसकलकलानिधाननरसिंहनन्दनगणितविद्याचतुराननारायणपण्डितविरचिता ।

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[6] धान्यादिके यद्घनहस्तमानं शास्त्रोदिता मागधखारिका सा ।

A similar sentence is found written at the end of each chapter of Gaṇita-kumudī. Moreover, the formula given in this Algebra for finding the approximate root of irrational numbers, is found in Vargaprakriti Vyavahára of Gaṇitakaumudī also.

Now I should like to deal here with some interesting questions and their formulae as found under the heading अथ कृतौ किञ्चित् कुतूहलमुच्यते i. e. some curiosity in square is told, of Chapter I, with my proofs.

I Q. What are those two numbers, the sum or difference of whose squares with unity for additive, becomes a square.

Proof :—

Let $x$, $y$ be the numbers.

Then by the condition of the question we have

$x^2 \pm y^2 + 1$ equal to a square, but this holds good when $\pm 2x = \pm y^2$ or $x = \dfrac{y^2}{2}$

$\therefore$ In terms of one unknown quantity the numbers are $y, \dfrac{y^2}{2}$. Now giving an arbitrary value (not less than 2) to $y$ we can easily find those two required numbers. whereupon Nārāyaṇa coins this formula :

इष्टः प्रथमो राशिस्तद्वर्गदलं प्रजायते चाऽन्यः ।
अनयोः कृतियुतिवियुती रूपयुते मूलदे भवतः ॥

An arbitrary quantity supposed is the first (required number) and half the square of the first is another (required number). The sum and difference of their squares with unity for additive, yields square roots.

Here it should be remarked that this formula becomes valid in the case when the first number is not less than two.

2 Q. What are those two numbers, the sum or difference of whose squares with unity for subtractive, becomes a square ?

Proof :—

Here if we suppose इष्टराशिः to be $\frac{a}{2}$ where $a =$ any arbitrary quantity, then by Bhāskara's formulā[7], the required numbers are

$$8\left(\frac{a}{2}\right)^4+1,\quad 8\left(\frac{a}{2}\right)^3;\ \text{or}\ \frac{a^4}{2}+1\ \text{and}\ a^3$$

Hence Nārāyaṇa's formula :—

आद्योऽसीष्टघनः स्यात् कृतिकृतिदलमेकयुग् भवेदन्यः ।
अनयोः कृतियुतिवियुती रूपोने मूलदे स्यातास् ॥

The first required number is the cube of an arbitrary quantity supposed, another (required number) is half the square of the square of the arbitrary quantity supposed, plus unity. The sum and difference of their squares with unity for subtractive yield square roots.

3 Q. What are those two numbers the product of whose sum and difference, plus unity, becomes a square ?

Suppose $2(x^2+y^2)$, $2(x^2-y^2)$...(1) are the two numbers. Then by the condition of the problem

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[7] इष्टस्य वर्गवर्गौ घनश्च तावष्टसङ्गुणौ प्रथमः ।
सैको राशी स्यातामेवं व्यक्तेऽथवाव्यक्ते ॥
For its proof see Bhāskara's Arithmetic, edited by my father.

We have $\{2(x^2+y^2)\}\ \{2(x^2-y^2)\}+1$ equals to a square. But this holds good when

$$4(x^4-y^4)+1$$
$$\text{or } 4x^4-4y^4+1$$
$$\text{or } 2.\ 2x^2.\ 1=4y^4$$
$$\text{or } x^2=y^4$$
$$\text{or } x=y^2$$

Substituting this value in (1) we get the numbers.

$$2(y^4+y^2) \text{ and } 2(y^4-y^2)$$

Now giving any arbitrary value to $y$, we can get the required two numbers.

Hence the author's formula :

इष्टवर्गकृतिर्द्विष्ठा वर्गोनाढ्या द्विसङ्गुणा ।
तयोर्योगान्तरे वर्गौ घाते रूपयुते भवेत् ॥

Write the square of the square of इष्टराशिः an arbitrary quantity supposed, at one place add to, and at another place subtract from it, the square of that supposed number, multiply these by 2, then the product of their sum and difference plus unity becomes a square ?

4 Q. What are those two numbers, the sum or difference of which becomes a square.

Here we know that $x^2+y^2\pm 2xy=(x\pm y)^2$

$\therefore$ The first number$=x^2+y^2$ and anothor$=2xy$. Now giving arbitrary values, but unequal values in the case of their difference, to $x$ and $y$ we can easily find the required numbers.

Hence the author's formula :

वर्गयुतिः प्रथमा स्यादभीष्टयोराहतिर्द्विगुणिताऽन्यः ।
संयोगे च वियोगे पृथक् तयोर्जायते वर्गः ॥

The sum of the squares of two arbitrary quantities supposed is the first number, twice the product of the two supposed numbers is another, then their sum or difference, taken separately becomes a square.

5Q. What are those two numbers, the sum or difference of which becomes a square and whose product becomes a cube?

According to the preceding formula, the two numbers $x^2+y^2$ and $2xy$, when multiplied by the square of any quantity, say by $z^2$, are the two numbers to be supposed.

Or

i. e. suppose $z^2\,(x^2+y^2)$ and $2xyz^2$ are the two numbers. By this supposition the two conditions (their sum and differece become squares) are satisfied.

By the third condition we have

$$\left\{ {}^2\,(x^2+y^2)\right\} \left\{2xyz^2\right\} \text{equal to a cube.}$$

or $z^4\,2xy\,(x^2+y^3)$ equal to a cube

But this holds good when

$$z^4=\frac{(a^3)^4}{\left\{2xy\,(x^2+y^2)\right\}^4} \quad \text{or } z^2=\frac{(a^3)^2}{\left\{2xy\,(x^2+y^2)\right\}^2}$$

where $a$=any arbitrary quantity.

Substituting this value of $z^2$ in the numbers supposed, the numbers become $\frac{(a^3)^2}{2xy\left\{(x^2+y^2)\right\}^2}(x^2+y^2)\&\frac{(a^3)^2}{\left\{2xy(x^2+y^2)\right\}^2}2xy$

Now giving arbitrary values to $x$. $y$ and $a$ we can get the required two numbers.

Hence the formula—

प्रायुक्तौ यौ च तयोर्वधकृतिभक्तेष्टघनकृति हतौ तौ ।
राश्योर्योगे विवरे वर्गौ घाते घनो भवेत् ॥

The aforesaid two numbers when multiplied by the quotient obtained by dividing the square of the cube of an arbitrary quantity by the square of their product, are the numbers required.

6 Q. What are those two numbers, the sum of whose squares becomes a cube and the sum of whose cubes becomes a square ?

Suppose $\frac{a^6}{y^2}$, $\frac{x.\,a^6}{y^2}$ are the two numbers, where $a$=any arbitrary quantity.

Then the sum of their squares $=a^{12}\left(\frac{1+x^2}{y^4}\right)$ which is, by the condition of the question, a cube.

But in the above expression, the first factor $a^{12}$ is evidently a cube, for it is equal to $(a^4)^3$.

Now if $\frac{1+x^2}{y^4}$ be a cube, then the condition of the problem may be satisfied.

Suppose $\frac{1+x^2}{y^4}=\frac{1}{y^3}$ $\therefore$ $1+x^2=y$ or $x^2=y-1$

$$\therefore\ x=\sqrt{y-1}$$

Substituting this value of $x$ in the numbers supposed, we get the numbers $\frac{a^6}{y^2}$ and $\frac{a^6\sqrt{y-1}}{y^2}$

Now, by the condition of the question, the sum of the cubes of these numbers is a square,

i. e. $\left(\frac{a^6}{y^2}\right)^3+\left(\frac{a^6\sqrt{y-1}}{y^2}\right)^3$ is a square.

or $\frac{a^{18}}{y^6}\left\{1+(y-1)^{\frac{3}{2}}\right\}$ is a square.

As the first factor $\frac{a^{18}}{y^6}=\left(\frac{a^9}{y^3}\right)^2$ is evidently a square, now to satisfy the condition $1+(y-1)^{\frac{3}{2}}$ must be a square, as such, the expression $1+(y-1)^{\frac{3}{2}}$ becomes a square in the case $y=5$ (the least value).

For $1+(y-1)^{\frac{3}{2}}=1+(5-1)^{\frac{3}{2}}=1+2^3=1+8=9=$ a square and $x=\sqrt{y-1}=\sqrt{5-1}=\sqrt{4}=2$.

Substituting these values of $x$ and $y$ in the two numbers supposed, we get the numbers $\frac{a^6}{25}$ and $\frac{2a^6}{25}$. Now giving any arbitrary value to $a$ we get the two required numbers.

Hence the author's formula.—

इष्टघनवर्ग एको द्विघ्नोऽन्यः पञ्चकृतिहतौ राशी ।
वर्गयुतौ च घनः स्यात् तयोर्भवेद्व घनयुतौ वर्गः ॥

The square of the cube of an arbitrary quantity is the first, and twice the first is another ; these when divided by the square of five are the required two numbers, the sum of whose squares becomes a cube, and the sum of whose cubes becomes a square.

7 Q. What is that number which when multiplied separately by two multipliers, & unity being added to each product, becomes a square ?

Suppose $x$ is the required number and two multipliers $m_1$ and $m_2$ respectively.

Then by the condition of the problem, we have

$$m_1 x+1=y^2 \text{ (suppose)}\ldots\ldots\ldots(1)$$

and $m^2 x+1=z^2$ (suppose).........(2)

Now by subtraction, we get

$$(m_1-m_2)\,x=(y^2-z^2)=(y-z)\,(y+z)$$

Suppose $y-z=k\,(m_1-m_2)$.........(3)

$$\therefore y+z=\frac{x}{k}\ldots\ldots\ldots(4)$$

Adding (3) and (4), we get

$$2y=\frac{x}{k}+k\,(m_1-m_2)$$

$$\therefore\ y=\tfrac{1}{2}\left\{\frac{x}{k}+k\ (m_1-m_2)\right\}$$

$$=\frac{x+k^2\ (m_1-m_2)}{2k}$$

Squaring both sides we get

$$y^2=\frac{x^2+2xk^2\ \ (m_1-m_2)+k^4\ (m_1-m_2)^2}{4k^2}$$

But by supposition $y^2=m_1\ x+1$

$$\therefore\ \frac{x^2+2xk^2\ \ (m_1-m_2)+k^4\ (m_1-m_2)^2}{4k^2}=m_1x+1$$

or $x^2+2xk^2\ \ (m_1-m_2)+k^4\ (m_1-m_2)^2=4k^2m_1\ x+4k^2$

or $x^2-2kx\ (m_1+m_2)=4k^2-k^4\ (m_1-m_2)^2$

Adding $k^4\ (m_1+m_2)^2$ to both sides we get

$x^2-2k^2x\ (m_1+m_2)+k^4\ (m_1+m_2)^2=4k^2-k^4\ (m_1-m_2)^2$
$\quad +k^4\ (m_1+m_2)^2$

or $\left\{x-k^2\ (m_1+m_2)\right\}^2=4k^2\ (k^2m_1m_2+1)$

Taking square root, we get

$$x-k^2\ (m_1+m_2)=\ \pm 2k\sqrt{k^2m_1m_2+1}$$

$$\therefore\ x=k^2\ (m_1+m_2)\pm 2k\sqrt{k^2m_1m_2+1}\ \ldots\ldots\ldots(5)$$

Now as the additive is unity, the least value that can be alloted to $x$ deserves to be zero, as this value of $x$ satisfies the equations (1) and (2).

In this case, when $x=o$, we must have

$$k^2\ (m_1+m_2)=2k\sqrt{k^2m_1m_2+1}$$

or $k^4\ (m_1+m_2)^2=4k^2\ (k^2m_1m_2+1)$

or $k^4m_1{}^2+2k^4m_1m_2+k^4m_2{}^2=4k^4m_1m_2+4k^2$

or $k^4\ (m_1-m_2)^2=4k^2$

$$\therefore\ k^2=\frac{4}{(m_1-m_2)^2}\ \text{or}\ \ k=\frac{2}{m_1-m_2}$$

Substituting this value of $k$ in (5) taking the upper sign in the right hand expression we get $x>0$

$$i.\ e.\ x=\frac{4\,(m_1+m_2)}{(m_1-m_2)^2}+\frac{2\cdot 2}{(m_1-m_2)}\sqrt{\frac{4m_1m_2}{(m_1-m_2)^2}+1}$$

$$=\frac{4\,(m_1+m_2)}{(m_1-m_2)^2}+\frac{4}{(m_1-m_2)}\sqrt{\frac{(m_1+m_2)^2}{(m_1-m_2)^2}}$$

$$=\frac{4\,(m_1+m_2)}{(m_1-m_2)^2}+\frac{4\,(m_1+m_2)}{(m_1-m_2)^2}$$

$$=\frac{8\,(m_1+m_2)}{(m_1-m_2)^2}$$

Hence Nārāyaṇa's formula :

गुणितो राशिर्याभ्यां द्विष्ठो रूपान्वितो भवेद्वर्गः ।
तद्युतिरष्टविगुणिता विवरकृतिविभाजिता राशिः ॥

Write in two different places the products of the required number and the two multipliers, add unity to each of the products, each of the expressions (thus found) will be a square. The required number is equal to eight times the sum of those two multipliers, divided by the square of the difference of those two multipliers.

In chapter X, under the heading of **अथवर्गप्रकृतिः** or affected squares, Nārāyaṇa has given a rule for extracting the approximate square root of irrational numbers by the help of affected squares. His rule runs thus :

मूलं ग्राह्यं यस्य च ( तद्द ) रूपक्षेपजे पदे तत्र ।
ज्येष्ठं ह्रस्वपदेन च समुद्धरेन्मूलमासन्नम् ॥

we should solve this indeterminate equation

$cx^2+1=y^2$ where c=coefficient=the irrational number of which the approximate root is to be extracted, $x$=the least Pada ( ह्रस्व ) and $y$=the greatest Pada ( ज्येष्ठ ). Then the division of the greatest Pada by the least gives the approximate root of the coefficient. i. e, of the irrational number.

If $\left.\begin{matrix} x = 6 \\ y = 19 \end{matrix}\right\}, \left.\begin{matrix} x = 228 \\ y = 721 \end{matrix}\right\}, \left.\begin{matrix} x = 8658 \\ y = 27379 \end{matrix}\right\}$. Hence

$$\sqrt{01} = \frac{19}{6} \text{ or } \frac{721}{228} \text{ or } \frac{27379}{8658} \ldots\ldots$$

At the end of this chapter, the author has given a rule for testing the product of two numbers. The rule runs :

इष्टहृतगुण्यगुणकावशेषघातस्तथेष्टहृच्छेषम् ।
तुल्यं चेदिष्टोद्धृतिशेषेण स्यात् स्फुहाऽत्र हतिः ॥

Divide the multiplicant and multiplier by an arbitrary quantity, get the product of the two remainders, found thus by division; divide this product by the assumed number, if the remainder, thus found, be equal to the remainder found after dividing the product of the multiplicant and multiplier by the same assumed number, then the product is correct. As for instance, suppose 29 = multiplicant, and 17 = multiplier and their product = 493. Take any arbitrary quantity, say 3; divide 29 and 17 by it, we get the remainders 2 and 2 respectively. Divide the product of these remainders, i. e. 4 by 3, the remainder is unity: dividing the product 493 by 3 we get the remainder also equal to unity. Then as the two remainders are equal, 493 is the true product of 29 and 17.

This very rule of Nārāyaṇa is found in Luca Pacioli's (Lucus de Burgo's) summa de Arithmetica, printed in 1494.

## MAGIC SQUARES.

Magic Squares are figures resembling a chess board in which the terms of an arithmetical progression are so arranged that their sum, whether taken diagonally or by rows or columns, is always the same.

The construction of such magic squares containing an odd or even number of cells was known to the Hindus for a long time. In Tantra Śāstra they are called Yantras.

As they were supposed to possess mystical properties, they were kept secret and were not dealt with in Arithmetic by Indian mathematicians. But Nārāyaṇa, defying this superstitious belief, touched upon the subject of magic squares under the heading of Bhadragaṇita and gave definite rules for the construction of them containing an odd or even number of cells, in the last chapter (XIV) of his Gaṇita-kaumudī, which, as being unearthed now, J. F. Montucla made argument that possibly magic corroborates the fact that India invented Magic Squares which have already been dealt with in Bhairava and Śiva Tāṇḍava Tantras prior to the Gaṇita-kaumudi. Being unaware of them squares were known to Hindus, but of this there is no certain evidence as expressed in his Histoire des mathematiques (Paris, 1802), for Ganita-kaumudi, as composed in 1356 A. D precedes all treatises on magic squares written by Europeans. In the fifteenth century, Manuel Moschopulus, a writer belonging to the Byzantine school, introduced into Europe, magic squares, which long after found a wider diffusion through Philippe de Lahire (1640-1718) and Karl Brandon Mollweide (1774-1815) who in 1816 A. D. collected the scattered rules into a book, De quadratis magicis.

Michael Stifel, (1486-1567) sometimes known by the Latin name of Stiffelius, was the first to investigate them in a scientific way. Although Adam Riese (1492-1559) had already introduced the subject into Germany, yet none of them was able to give a simple rule for their construction. Towards the end of the sixteenth century such rules were known to a few German mathematicians, as for instance, to Peter Roth, the Rechenmeiotter of Nuremburg. In 1612 Claude Gospard Bachet de Meziriac (1581-1638) published in his Problemes plaisants, a general rule for squares containing an odd number of cells, but could not find a solution for squares containing an even number. Bernard Frenicle de Bessy (1605-1675) made a real advance beyond Bachet. He gave rules for the construction of both classes of squares and even discovered squares that maintain their characteristics after striking off the outer rows and columns.

More modern works are due to Kochansky, 1686; to Sauveur, 1710; to Hugel, (Ansbach, 1859); to Pessl (Amberg, 1872); to Professor Scheffler, 1882, and to Thompson (Quarterly Journal of Mathematics, Vol. X).

In 1903 Hermann Schubert has given useful hints and information regarding magic squares in his mathematical Essays and Recreations.

# V.—FOOD & DRINK IN THE RĀMĀYANIC AGE.

By Manmotho Nath Roy.

It is hardly a compliment that we pay to the Great Sage Vālmīki when we say that his Rāmāyaṇa is a wonderful production from more than one point of view. It is probably the only book written by an Ancient Ārya that gives us a glowing picture of three distinct civilisations at once. Of these two, viz. those of the Āryas and of Rākṣasas, were highly advanced, while that of the Vānaras certainly lagged far behind the other two.

When we come to talk about the civilisation of a certain people, their mode of living claims our first attention. If in the matter of living they pay the minutest attention to comfort by overcoming natural obstacles through art in respect of dwelling-places, food and drink, dress, and the like departments of life, we say unhesitatingly that they are civilised; on the other hand if they manage to live any how, fighting as best as they can with nature or succumbing to her freaks when resistance is impossible, we say that they are uncivilised.

Of all the things in life food and drink occupy along with dress the most prominent place. The simplest reason why man should devote so much attention to these things is this that it concerns his own self. Decent dress while protecting his body from nature, goes to add to the beauty of his person while decent dishes satisfy his palate. In the present paper I propose to confine myself to the food and drink of the Ancient Āryas as it was in the days of the Rāmāyaṇa.

In this respect as in others the Vānaras were distinctly deficient as is plainly admitted by Vāli who while reproaching Rāma for his cowardly assassination, tells him

फलमूलाशनं नित्यं वानरं वनगोचरम् । (IV. 17. 25)

We Vānaras are foresters by nature and live on fruits and roots. Again,

वयं वनचरा राम मृगा मूलफलाशिनः ।
एषा प्रकृतिरस्माकं पुरुषस्त्वं नरेश्वर ॥
भूमिर्हिरण्यं रूपं च निग्रहे कारणानि च ।
तत्र कस्ते वने लोभो मदीयेषु फलेषु वा ॥ (IV. 17. 30--31)

O Lord of men, you are the Perfect Being, while we foresters naturally live on roots and fruits. Fertile lands, gold and silver are the natural causes that ultimately lead to warfare, while our forests or their yields can hardl provoke you to open hostilities with us.

The Āryas who were a highly civilised people, could prepare various kinds of vegetarian and non-vegetarian dishes. Indeed in the art of cooking they made as much progress as they did in the spiritual region.

And there is nothing to be surprised at. For like the Greeks of ancient Europe, the Aryas of India too aimed at Perfection. But while the attention of the Greeks was confined to purely mundane matters, the Āryas tried to attain the same goal by paying an impartial, well-balanced and harmonious attention to the Tri-Varga, which consists of Dharma, Artha and Kāma.

It was an essential thing that the food eaten should consist of the six Rasas. In the Rāmāyaṇa we find ample references to this fact. For instance, while king Viśvāmitra with his numerous retinue arrived at the door of the saintly Vaśiṣṭha and the latter humbly asked his guest's permission to entertain him with his followers to a dinner party, Vaśiṣṭha is said to have prayed to his desire-yielding cow, Śavali

यस्य यस्य यथाकामं षड्रसेष्वभिपूजितम् ।
तत्सर्वं कामधुग्दिव्ये अभिवर्ष कृते मम ॥
रसेनान्नेन पानेन लेह्यचोष्येण संयुतम् ।
अन्नानां निचयं सर्वं सृजस्व शबले त्वर ॥ (I. 52. 22—23.)

O Divine Desire-yielding cow, for my sake be pleased to produce dishes attended with six Rasas to suit different tastes. O Śavali, produce without delay various kinds of food consisting of juices, eatables, drinks, lick-ables and suck-ables. Similarly Bharadvāja prays to various gods to help him in entertaining his royal guest, Bharata with his followers—

इह मे भगवान्सोमो विधत्तामन्नमुत्तमम् ।
भक्ष्यं भोज्यं च चोष्यं च लेह्यं च विविधं बहु ॥ (II. 91. 20.)

May the Lord Soma supply me with the best dishes consisting of various kinds of edibles, foods, lick-ables, suck-ables etc.

Again Guha, the lord of the Niṣādas offered his royal guests, Rāma, Sītā and Lakṣmaṇa food consisting of भक्ष्यम्, भोज्यम्, पेयम् and लेह्यम् (II. 50. 39).

*Vegetarian dishes*—The various vegetarian salt-dishes eaten by our ancestors would certainly offer an interesting reading, but in the present case the details are sadly lacking in our Source-book. Still we would cull out a few details. On the occasion of Daśaratha's Putreṣṭi sacrifices, we are told, hillocks of eatables were prepared in accordance with the injunctions of the Science of cooking for the guests (1. 14. 15) and they were highly appreciated by the respectable part of the guests (द्विजर्षभाः). But it is not enough !

Similarly on the eve of Rāma's coronation Vaśiṣṭha directed the royal officers

प्रशस्तमन्नं गुणवद्दधिक्षीरोपसेचनम् ।
द्विजानां शतसाहस्रं यत्प्रकाममलं भवेत् ॥ (II. 3. 14).

to get ready so much of eat-ables, curds and thick milk (क्षीर) as would suffice to feed a hundred thousand Brāhmaṇas. This too does not go far.

Again, on the exile of Rāma, Kauśalyā reproached the hard-heartedness of Daśaratha with regard to Sītā in the following words :

भुक्त्वाशनं विशालाक्षी सूपदंशान्वितं शुभं ।
वन्यं नैवारमाहारं कथं सीतोपभोक्ष्यते ॥

(II. 61. 5).

The wide-eyed Sītā having so long been accustomed to eat food consisting of various salt dishes and hard substances that could be bitten eff, how could she subsist on the wild and coarse नीवार rice ! This too is rather indefinite !

A ray of light appears, however, when we read that at the request of Vaśiṣṭha, Śavali, the desire-yielding cow, produced

उष्णाढ्यस्यौदनस्यात्र राशयः पर्वतोपमाः ।
मृष्टान्यन्नानि सूपांश्च दधिकुल्यास्तथैव च ॥
नानास्वादुरसानां च खाण्डवानां तथैव च ।
भोजनानि सुपूर्णानि गौडानि च सहस्रशः ॥

(I. 53. 3-4)

in addition to thousands of silver plates, piles of smoking rice, sweet Polaos (मृष्टान्यन्नानि), soups, curd-preparations and various kinds of sweets.

The list, as usual, is by no means exhaustive. It certainly does not include all the salt dishes eaten by the Āryas. It also includes some sweet-dishes and a few lickables. Again, regarding the soup-preparations referred to above, nobody is certain if they were vegetarian dishes. But it may be guessed that Vaśiṣṭha, unlike Bharadvāja, offered only vegetable dishes to his illustrious guests, as in the text we come across no meat-preparations at this particular spot.

At another place, on the occasion of Bharadvāja's entertainment of Bharata and his retinue we read of

फलनिर्यहसंसिद्धैः सूपैर्गन्धरसान्वितैः ॥

(II. 91. 67)

soups, highly tasteful and scented, prepared with the juice of fruits. In connection with the same episode we read of

ह्रदाः पूर्णा रसालस्य दध्नः श्वेतस्य चापरे ।
बभूवुः पयसश्चान्ये शर्कराणां च संचयाः ॥

(II. 91. 73)

tanks full of **रसाल** (a curd preparation) and curds mixed with sugar. Here too, as elsewhere, the details about various salt vegetable dishes are lacking.

In another connection we read of **कृशर** (II. 75. 30) which might mean the modern khichri (Wilson) or a dish composed of milk, sesamum and rice (Ibid). In the latter case it becomes a sweet dish! The notable point with regard to this palatable dish was this that it, along with **पायस** and goat's flesh, was not to be taken until offered to gods (**वृथा**) (II. 75. 30 .

The reference to **पायस** (a preparation of rice boiled in milk with sweets) is numerous. At the conclusion of the Putreṣṭi Sacrifice the Prājāpatya man offered a dish of divine **पायस** to Daśaratha (I. 16. 19). The forest-lands round Bharadvāja's hermitage become muddy on account of the over-flow of **पायस** (II. 91.69). Indra too is said to have offered a plate of **पायस** to Sītā during her detention in Laṅkā (III. 56 A. 24).

These instances might be multiplied.

*Meat-dishes*—The curtain rises, however, when we come to this point, we no longer grope in the dark and the pieces of information supplied are plentiful.

Indeed, it may not be too much to say that at this stage of their civilisation the Āryas were more attached to these invigorating dishes than to the insipid vegetabele dishes and that of the creatures that infest the aerial, earthly or watery regions, they spared very few.

The Vānaras certainly belonged to the latter class as their flesh as well as their skin, bones and hair were never utilised by the respectable people.

अधार्यम् चर्म मे सद्भी रोमाण्यस्थि च वर्जितम् ।
अभक्ष्याणि च मांसानि त्वद्विधैर्धर्मचारिभिः ॥
(IV. 17. 38)

चर्म चास्थि च मे राम न स्पृशन्ति मनीषिणः ।
अभक्ष्यानि च मांसानि सोऽहं पञ्चनखो हतः ॥
(IV. 17. 40)

While reproaching Rāma on his death-bed, Vāli says that the respectable people utilised neither their skin nor their bones and hair nor their flesh could be eaten by the dutiful men like Rāma.

Though belonging to the class of five-nailed creatures, the flesh of the Vānaras was never eaten and their skin and bones never touched. Here as in other respects what was rejected by the respectable section of the people, might have been utilised by the poorer classes of the people.

Elsewhere we read that the मुष्टिक s (modern Domes) ate of the flesh of dogs (I. 59. 19)! But these were the outcastes who had very little connection with the society!

Indeed, the preference of our hero for meat dishes even while he was wandering about as an exile staggers our imagination! One is inclined to take his words at their proper face-value when he tells Kauśalyā the following to dissuade her from her intention to follow him into exile :

चतुर्दश हि वर्षाणि वत्स्यामि विजने वने ।
कन्दमूलफलैर्जीवान्हित्वा मुनिवदामिषम् ॥ (II. 20. 29.)

I have to live on fruits and roots for fourteen years rejecting non-vegetarian dishes like the sages of the forests!

Yet we find the exiled princes living mainly, if not exclusively, on meat diet! They hunt down four deer on the first day of exile (II. 52. 102). They kill many more in the forests near the Yamunā (II. 55. 32). Rāma consoles Sītā on the banks of the Mandākinī by drawing her attention to the well cooked meat-preparations (II. 96. 2). Rāma having killed Mārīca hastened towards his hermitage and on the way he hunted down a पृषत deer for the table (III. 44. 27). Sītā requested Rāvaṇa in disguise, to wait till her husband returned with the flesh of the रुरु (deer), गोधा (guana), swine and many other creatures (III. 47. 23).

Indeed in the matter of preference for meat-diet, Rāma over-shoots the mark when he decided to leave the peaceful hermitage of Sutīkṣṇa, for he could not kill the deer that infested those regions with his "well-polished arrows, the tips of which were bent low" (III. 7. 20—22).

On the occasion of Śrāddha ceremonies it was customary, unlike these days, to feed the Brāhmaṇas on meat-diet. Ilvala, the treacherous Asura of the Daṇḍaka forests, used to invite the Brāhmaṇas of the neighbourhood on the pretended occasion of a Śrāddha ceremony and used to offer them the meat of a sheep, the form of which his own brother Vātāpi had assumed. When the dinner was over, Ilvala cried aloud "Vātāpi! Vātāpi!!" Hearing his voice Vātāpi would come out tearing open the stomachs of the helpless Brāhmaṇa guests! The great Sage Agastya is said to have digested this stiff morsel too (III. 11. 55—64). Again, in the rites pertaining to the Śrāddha ceremony the flesh of only castrated rams was offered to the Pitṛs, as the testics of the ram were substituted for the lost ones of Indra. (I. 49.9).

People used to eat with great relish even dried meat.

Guha, the lord of the Niṣādas is said to have invited Bharata in these words

अस्ति मूलफलं चैतन्निषादैः स्वयमर्जितम् ।
आर्द्रं शुष्कं यथामांसं वन्यं चोच्चावचं तथा ॥
(II. 84. 17).

We niṣādas, have in store enough of fruits and roots, as well as fresh and dried meat.

On the occasion of the entertainment arranged by Bharadvāja in honour of Bharata's visit to his hermitage, his followers were sumptuously fed on the meat of goats, sheep and swines (II. 91. 67). They were also supplied with the flesh of deer, pea-cocks and wild-cocks roasted in pans (पैठर) (II. 91. 70).

While crossing the Gaṅgā, the exiled Sītā is said to have prayed for a safe return home after 14 years in return for a special vow to worship her duly with wine and मांसभूतौदन which is nothing but the familiar meat-Polao (II. 52.89). It was certainly a rich dish and we can fairly assume that it was eaten on ceremonious occasions by the rich folk.

Of the fowls we have mentioned above the practice of eating wild cocks and pea-cocks (II. 91. 70.) Of the water-fowls the flesh of हंस (swans), प्लव (ducks), क्रौञ्च (herons) and कुरर (ospreys) was in requisition. We are told that in the Pampā regions these birds were plentiful and Kavandha advises Rāma to eat of these to his fill when he visited those parts (III. 73. 12—14).

Of the five-nailed creatures we are told that the Brāhmaṇas and the Kṣattriyas took the flesh of the following: hares, porcupines, hedge-hogs, turtles and iguana

पञ्च पञ्चनखा भक्ष्या ब्रह्मक्षत्रेण राघव ।
शल्यकः श्वाविधो गोधा शशः कूर्मश्च पञ्चमः ॥
(IV. 17. 39).

The Rākṣasas who were probably cannibals (III. 56. 24) were a highly civilised people. Their art, their institutions, their architecture, their defensive and offensive warfare and their standard of living rouse the admiration of every sincere student of social history. They could certainly prepare numerous kinds of meat-dishes. We come across some of these in the description of Rāvaṇa's Drinking-House (V. 11. 4—36).

"In that Drinking House Hanumān came across covers of deer, buffalo and swine arranged in order. In gold dishes he came across the cooked meat of pea-cocks and cocks which were left untouched. At one place he saw the leavings of the plate consisting of the meat of pigs, dear, pea-cocks and hedge-hogs (शल्य) cooked in curds along with salt. At another place he saw partly eaten plates consisting of the meats of lizards (कृकल), goats, hares, buffaloes and decently cooked fishes. The House was well-stuffed with various kinds of lick-ables, drinks, foods and parti-coloured sweets (V. 11. 14—8.)

*Fish-eating*—Custom has so far changed that now-a-days the mere mention of fish as a food-stuff would suffice to take away the breath of an Upcountry man! Yet the hero of the Rāmāyaṇa was a man from Oude and the scene of the story is laid in modern U. P. And the wonder is that he was as good a fish-eater as any Bengali or a Madrasi is!

In the Rāmāyaṇa the reference to the practice of fish-eating is quite liberal. We are expressly told that among the presents offered by Guha to Bharata—fish was included! Certainly it was meant to be utilised as food.

इत्युक्त्वोपायनं गृह्य मत्स्यमांसमधूनि च ।
अभिचक्राम भरतं निषादाधिपतिर्गुहः ॥

(II. 84. 10).

The दाशs as a class (II. 89-18) were boat-men and fishermen by occupation. The existence of a distinct class of men who lived by catching fish, suggests the idea that it was extensively used as a food-stuff. Then the poet at more than one place refers to the practice of angling by means of a hook (III. 52. 27 ; 68. 13).

Again, while directing Rāma to the Pampā regions, Kavandha dwells at length on the food-stuffs which could be had there. In this connection he says :

घृतपिण्डोपमान् स्थूलांस्तान्द्विजान्भक्षयिष्यथ ।
रोहितांश्च क्रतुण्डांश्च नलमीनांश्च राघव ॥
पम्पायामिषुभिर्मत्स्यांस्तत्र राम वरान्हतान् ।
निस्त्वक्पक्षानयस्तप्तानकृशानेककण्टकान् ॥
तव भक्त्या समायुक्तो लक्ष्मणः संप्रदास्यति ।
भृशं तान्खादतो मत्स्यान्पम्पायाः पुष्पसंचये ॥

(III. 73. 14-16.)

You will unhesitatingly eat of those birds, rich with fat and the fishes known as the Rohita (modern Rohu), the Chakratuṇḍa (a kind of fish) and the Nalamīna (a kind of fish); your devoted companion, Lakṣmaṇa would shoot them down with his arrows, dress them and then roast them on an iron spit for you ! (He will supply you with the clear, limpid water of the Pampā) while you are busy eating the fishes !

*Drinks—*

नहि धर्मार्थसिद्ध्यर्थं पानमेव प्रशस्यते ।
पानादर्थश्च कामश्च धर्मश्च परिहीयते ॥

(IV. 33. 46)

One who desires to achieve success in the regions of Dharma, and Artha, must not take to drinking, as a drunkard comes to lose Dharma Artha and Kāma.

Thus though alive to the evils of the habit of drinking, the popularity it enjoyed those days, simply staggers our imagination. What to speak of the Āryas and the Rākṣasas, even the semi-civilised Vānaras too took to drinking and the wonder is that the society tolerated this vice !

The notable exceptions were the Brāhmaṇas who for fear of a public censure never dared to get drunk (II. 12. 78) and the Ṛṣis who inhabited the forests. Though the Ṛṣis certainly never took to drinking, still we find the greatest of them acting as abetors. At the request of the great Vaśiṣṭha Śavali is said to have produced

इक्षून्मधूंस्तथा लाजान्मैरेयांश्च वरासवान् ।
पानानि च महार्हाणि भक्ष्यांश्चोच्चावचानपि ॥

(I. 53. 2).

in addition to various covers, a large quantity of sugar-canes, honey, fried grains, māireya wine and other costly drinks.

Similarly we are told that Bharadvāja on the eve of entertaining Bharata's men to a feast prayed to some rivers to supply him with

अन्याः स्रवन्तु मैरेयं सुरामन्याः सुनिष्ठिताम् ।
अपराश्चोदकं शीतमिक्षुकाण्डरसोपमम् ॥

(II. 91. 15).

the māireya wine and other well-finished surās, while others might supply him with cool and sweet-tasted drinking water. He repeats his prayers to the Lord Soma for a supply of "drinks such as Surā" (II. 91. 21). In connection with the same episode we are told that one could find "tankfuls of maireya wine" (II. 91. 70).

The Āryas made use of the Surā in worshipping the gods too. We are told that while crossing the Gaṅgā in the company of Rāma and Lakṣmaṇa, the exiled Sitā vows to offer a formal thanks giving to Gaṅgā by worshipping her with

गवां शतसहस्रं च वस्त्राण्यन्नं च पेशलम् ।
ब्राह्मणेभ्यः प्रदास्यामि तव प्रियचिकीर्षया ॥

सुराघटसहस्रेण मांसभूतौदनेन च ।
यक्ष्ये त्वां प्रीयतां देवि पुरीं पुनरुपागता ॥
(II. 82. 88-89.)

a thousand jars of surā and a proportionate quantity of meat Polāo on a safe return home. To win her favour she also promised to make a gift of a hundred thousand cows, clothes and agreeable food-stuffs to the Brāhmaṇas. Again while crossing the Yamunā she promised

यक्ष्ये त्वां गोसहस्रेण सुराघटशतेन च ।
स्वस्तिप्रत्यागते रामे पुरीमिक्ष्वाकुपालिताम्॥
(II. 56. 20).

to ingratiate her with a thousand cows and a hundred jars of surā on the safe return of Rāma to the capital city of the Ikṣvākus.

Besides मैरेय and सुरा we also hear of the वारुणी which was for the first time churned up during the समुद्रमन्थन episode (I. 45. 36-37). Kumbha-karṇa is also said to have advised Rāvaṇa to drink hard the Vāruni and enjoy himself and shake off all anxieties, as Sītā would certainly come round when Rāma would die! (VI. 12. 40). We also hear of a cheap variety of wine called the Sauvīraka. Sītā is said to have refused the advances of Rāvaṇa in these words:

सुराग्र्यसौवीरकयोर्यदन्तरं तदन्तरं दाशरथेस्तवैव च ॥
(III. 48. 45.)

"There is as much difference between Rāma and yourself as there is between the best Surā and the Sauvīraka." Probably this economical drink was the produce of the once-famous western port Sauvīra.

The honey (मधु) was also a favourite drink. Daśaratha hopes

निघ्नन्मृगान्कुञ्जरांश्च पिबंश्चारण्यकं मधु ।
नदीश्च विविधाः पश्यन्न राज्यं संस्मरिष्यति ॥
(II. 36. 6).

that by hunting down the deer and the elephants, by drinking the forest honey and by seeing various rivers, Rāma might forget the loss of a kingdom !

The Vānaras though in point of civilisation lagged far behind the Āryas and the Rākṣasas, fully kept pace with the other two in the matter of drinking. On the approach of the autumn, Rāma is justly angry with Sugrīva, because steeped in wine and women, he failed to locate the whereabouts of Sītā (IV. 30. 79). While Lakṣmaṇa was passing through Kiṣkindhā, the atmosphere of the streets was laden with the smell of maireya and madhu (IV. 33. 7). Sugrīva asks Hanumān to send for the Vānaras of the Mahāruṇa hills who were hard drinkers of the maireya मधु (IV. 37. 7).

The intoxicating effect of मधु on the Vānaras is a pleasant reading. After discovering Sītā in Lankā Angada's followers broke into the Madhu-Vana—the preserved forest of Sugrīva, and there they drank hard and then began to dance and frisk about, and sing and laugh and weep, recite aloud, and leap about (V. 61. 14-19). Then we are told they got up a drunken brawl with the guards and roughly handled Dadhi-mukha, the officer-in-charge and his men (V. 62 9-34).

Among the Vānaras, the women too took to drinking and we are told that Tārā when she came out at the desire of Sugrīva to receive Lakṣmaṇa who was not in a pleasant mood just at that time, did not feel shy as she was in a drunken state (IV. 33. 40).

Among the Rākṣasas probably the practice was universal. Men as well as women, every body kissed the cup. More than once we are told that the Rākṣasī girls took to drinking (V. 5. 17 ; V. 10. 35 ; V. 17. 16). Hanumān finds Rāvaṇa sleeping away his intoxication (V. 10. 13 & 23). In the course of his spying once he came across in Rāvaṇa's harem a party of drunkards engaged in quarelling or indulging in inconsistent talks accompanied by violent gestures, or busy blaming one another and then striking hard their chests or embracing their sweet-hearts. Some were beautifully attired while they were twanging their bow-strings (V. 5. 10-13).

*Drinking-Houses*—We propose to wind up this paper by giving a brief account of the various Drinking-Houses referred to in our text. Bharata on his return from Kekaya found Ayodhyā cold and cheerless like

क्षीणपानोत्तमैर्भग्नैः शरावैरभिसंवृताम् ।
हतशौण्डामिव ध्वस्तां पानभूमिमसंस्कृताम् ॥
(II. 114. 14.)

A dirty drinking-booth deserted by the drunkards, choked with filth and broken drinking-pots !

Again, while leaping across the Sea, Hanumān is said to have taken his start from the Mahendra Hills. Just at that time the Vidyādharas were assembled in a Drinking-house on the heights of those hills. The agitation was so very violent that these fellows had to desert it wholesale along with their women-folk leaving behind the gold seats and plates, costly cups and jugs ; the various kinds of lickables, numerous meat-dishes, leathern pots made of the hides of the Ṛṣabha deer and the golden broad-swords (V. 1. 22-24).

Want of space does not permit us to give a detailed description of the Palace Drinking-House at Laṅkā as has been actually done by our author. Perforce we will satisfy ourselves by giving a brief account of it :

"Every inmate was sleeping away the fatigue produced by the game (at dice ?), by music accompanied by dancing and by wine. It was divided into chambers and was liberally supplied with everything that the heart could wish for—with various meat-dishes and fruits etc. The floor was groaning under the weight of ornaments, drinking-cups, dishes and fruits. The house was decorated with flowers and furnished with gold bed-steads and seats. It was well-stuffed with various kinds of wine, e. g. शर्करासव (Extract of Sugar), माध्वीका (Extract of honey), पुष्पासव (Extract of flowers) and फलासव (Extract of fruits)—all arranged in order. The beauty of the floor was enhanced by garlands made of various kinds of flowers, dinking cups made of crystal, gold and silver. There were placed at a distance huge wine flasks the mouths of which were covered with jugs. Here and there were placed gold, silver and jewel cups—some bubbling with wine, some only half-drunk, some empty, while the contents of some had not been tasted at all (V.11.5-36).

*Conclusion*—Properly speaking food and drink belong partly to the region of Kāma because they go to satisfy one's palate and partly to the region of Artha because they help one towards the realisation of the object or objects nearest to one's heart. To connect these with Dharma, it is laid down

कच्चित्स्वादुकृतं भोज्यमेको नाश्नासि राघव ।
कच्चिदाशंसमानेभ्यो मित्रेभ्यः संप्रयच्छसि ॥

(II. 100. 75).

Rāma enquired of Bharata if he ate of the best dishes all alone and if he refused to give away in charity the things prayed for by his friends.

Again, to console the heart of the bereaved mother, Kauśalyā, Bharata swears

पुत्रैर्दारैश्च भृत्यैश्च स्वगृहे परिवारितः ।
स एको मृष्टमश्नातु यस्यार्योऽनुमते गतः ॥

(II. 75. 34).

Had I connived at the banishment of Rāma, may I eat of the best dishes all alone, depriving the sons, wives and servants!

Thus the ancient Āryas in this particular sphere of life as in all others aimed at an all-round, harmonious and well-balanced development of the body as well as of the soul, and should we repeat that this is what makes gods of men ?

# VI.—THE PROBLEM OE CAUSALITY : SANKHYA-YOGA VIEW.

### By Gopinath Kaviraj.

In the history of ancient Indian Philosophy the controversy over the doctrine of Cansality is very old indeed. Although the nature of the controversy has varied from time to time, the fundamental problem has persisted. It is: what is the relation between the cause and the effect? Does the cause contain the effect in its implicit form or is the effect a new thing altogether? What are the presuppositions of the genetic process? Does it imply simply a gradual unfoldment of what lies within, as eternally existing, or is it a creation *ex nihil*?

We know that various answers can be given to these questions according to the differences of our view-point. The Naiyāyika, with his commonsense and realistic assumptions, would naturally be inclined to favour the view which maintains an absolute difference (अत्यन्तभेद) between the cause (material) and the effect. To him the cause and the effect are two distinct concepts, though bound together by a mysterious tie of relationship; for it cannot be gainsaid, the Naiyāyika would say, that though the effect is distinct from its cause—indeed from everything else in creation,—by virtue of its own apparent individuality, it still inheres in it during its existence, and that even when it does not exist, i. e., before its production and after its destruction, its non-existence, technically known as प्रागभाव and ध्वंस, is predicable of its cause alone. As to what constitutes this bond of affinity nothing is said beyond the fact that it is in the nature of an effect to be thus intimately related to its own material cause. It is an ultimate fact and has to be accepted as such.

This appeal to "the nature of things" on the part of the Naiyāyika amounts practically to a confession of weakness of his theory. The Yogin, who is an advacate of Satkārya vāda, rejects the Naiyāyika hypothesis and affirms that the effect, in so far as its essence is concerned, is identical with the cause from which it comes forth. The so-called production and destruction do not really mean that the product comes into and passes away from existence. Every product being an aspect of the Supreme Prakṛti in which it exists somehow involved & identified as an eternal moment, creation out of nothing and annihilation is an absurdity. Production therefore is differentiation and dissolution is redintegration. The process of becoming, with which the problem of causality has to deal, does indeed imply a change, but it is a change conceived as the transition of a dharma from an unmanifest to a manifest state and from the manifest back into the unmanifest condition. The substrate of change is everywhere and always an existing unit.

The sum and substance of the Satkāryavādin's contention seems to be this. We all must start from the assumption, under the necessity of our thought, that being comes from *being* and *not from non-being*, and that an absolute void giving rise to being is inconceiveable. The denial of this principle would land us in contradictions. We conclude therefore that the effect is real ( सत् ).

In the text books of the school we find a set of 5 arguments brought forward to establish the reality ( सत्ता ) of the effect (even before its origin) :

(1) The fact that what is unreal ( असत् ) can not be subject to the Causal operation (कारक व्यापार).

(2) The fact that an appropriate material ( उपादान ) is resorted to for bringing about a certain effect, in other words,

that every material is not by nature capable of producing every effect. This means that the material cause, which is somehow related to the effect in question, brings about that effect. But if the effect were not existing there would be no relation and consequently no production. An unrelated material is no material at all.

(3) And if the necessity of the relation between the material and the effect be not admitted, it would imply that the fitness of the material is not a condition of production and that any effect could result from any cause. This would be subversive of all order and so against our experience.

(4) This difficulty cannot be got over by the assumption of Śakti even, as the Mīmāṁsakas seem to do. They declare that an effect, before origin, is indeed non-existent (असत्) and that the cause is therefore indeed unrelated. Still there would be no irregularity, for we admit, they say, that the cause, in so far as it possesses a Śakti favourable to a certain effect, does produce that effect. As to the question whether the cause possesses a particular Śakti or not, it can only be answered *a fortiori*, for it is inferred by observation of the effect.

(5) The last argument is 'कारणभावात्,', viz., that the effect is nothing different from the cause. If the cause be existent (सत्) there is no reason to maintain that the effect, which is only a mode of the cause, should be non-existent (असत्).

This last argument requires to be expanded. We have already said that according to Sāṅkhya, unlike Nyāya-Vaiśeṣika, the relation between cause and effect is declared to be identity ( अभेद, तादात्म्य ). The Naiyāyika, with his pragmatic attitude towards reality, makes utility the criterion of existence सत्ता ) and approaches the problem in a semi-

Buddhistic fashion. To him therefore the effect, say a jar, is altogether a distinct entity from its cause, clay, for both donot serve the self-same purpose. This is अर्थक्रियाभेद. Besides this, there are other grounds which, to a Realist Philosopher, help to differentiate one object from another. These are बुद्धि(=प्रतीति), व्यपदेश and अर्थक्रियाव्यवस्था. On these grounds, too, the Naiyāyika seeks to establish the difference of the effect from the cause. Thus the notion of jar is distinct from that of clay and consequently corresponding to this notinal or logical difference the Naiyāyika would say there must be a real difference in the objective world. In other words, jar and clay, as objective realities, must be mutually different. So too differences of names and functions point to a difference in reality.

These are some of the stock arguments of the Naiyāyika. But they do not appear to have much weight against the Sāṅkhya-Yoga position. They lose their point as soon as they are aimed at a system in which the so-called Realism finds little support. The अर्थक्रियाभेद is really no sure test of objective difference, for the same object may have different अर्थक्रियाs ; nor is अर्थक्रियाव्यवस्था a test, for different collections of the same cause may serve different purposes. The difference of names, viz. clay and jar, is no proof of difference either, for in that case a forest would have to be postulated as different from the individual trees composing it.

The true relation between the cause and the effect, therefore, is that the effect is a dharma, an aspect, of the cause and constitutes a mode of it. The Primary Prakṛti being the equilibrium of the three guṇas, the effects or vikāras are nothing but various modifications and collocations of it. In essence the cause and the effect are identical, for both consist of guṇas and it is in difference of collocation (संस्थानभेद) that the difference between the two, as it reveals itself to our consciousness, consists. And this difference in collocation is a peculiar manifestation. That of which it is a manifestation remains always in the back-ground, unmanifest. In the last resort the cause, the Prakṛti, the *Materia Prima*, is the Unmanifest and the effect, the Vikāra, is the manifested world of manifold existence; and the manifested world is always held within the bosom of that unmanifest, universal Being.

The doctrine of सत्कार्य therefore implies, as we often find in Indian Philosophy, that the Universe, with an infinite number of cosmic systems belonging to it, is always existing in Prakṛti as its aspects. The evolution of a Universe out of Void has no meaning. The Buddhists, together with the Naiyāyıka and Vaiśeṣika, believe that the product has no existence prior to its origination and that it loses its existence as soon as it is destroyed. What this really means and how far it is justified we shall try to explain else where. But we may just observe here that the whole doctrine of Satkārya is a blow to this position.

To make the Yoga thesis more clear we give here a brief analysis of its concept of substance or dharmin. In the technical nomenclature of Indian Philosophy, the term dharmin bears the sense of "substrate, subject, that in which something is held, that of which something is predicated" and dharma means the "aspect of dharmī, predicate, content, and so forth". All predication, and therefore all judgment, involves the affirmation (विधान) or denial (निषेध) of a particular dharma with referece to a particular dharmin. In fact every proposition, which is an expression of judgment, bears testimony to the fact of predication. Now, though predication is made—and our entire phenomenal existence is necessarily based upon this—the subject of predication remains always, so far as its nature and essence are concerned, a point of controversy. When it is said that "the flower is red" the proposition is certainly intelligible to common sense, but on closer examination the meaning of the proposition furnishes a topic for discussion. It reveals the same old problem which Nāgasena raised before Menander more than 2000 years ago. What is it to which I am attributing redness? What is meant by 'flower'? Is it a mere bundle (संघात, समुदाय) of sensible qualities or is there a real objective ground, a substrate, to which the qualities are attached by some natural relation? We know that two answers are usually given to this question. The first is that of the Buddhists and in a certain sense of the Vaiyākaraṇas. The second answer comes from Nyāya-Vaiśeṣika. The Vedāntic position on this question is one of compromise between Idealism and Realism, but it tends towards the former. And the Yoga view too is more or less Idealistic, though with an important qualification.

In other words, the Buddhists deny the existence of a substance away from the qualities and a whole as distinct from the parts. But the Realists, to whom the external world has an objective, extra-mental value, are not satisfied with this view. They posit a real substance in which various qualities inhere and which is not a mere collection of guṇas but has an independent existence. So too with the whole (अवयवी) which results, as a distinct and independent object, from the combination of parts. In Vedānta, also, the former view is favoured. Śaṅkara, in Bṛhad Āraṇyaka Bhāṣya, plainly denies substantiality to the atoms and describes them as mere guṇas.

But the Yoga theory is more clear on the point. It is said indeed that dharma is the guṇa, or set of guṇas, by which the dharmin is made known to us and that this guṇa may be any of the sensible qualities, viz., colour, sound, etc., or any of their combinations. But this ought not to imply that there is any fundamental distinction between dharma and dharmin. Both of these are at bottom (परमार्थतः) one.* They are different only in व्यवहार। And since this difference between dharma and dharmin and between one dharma and another is founded on the appearance and disappearance of the dharmas which is due to time-limitation, it is evident that in Eternity, where there is no distinction between Past and Future, all the dharmas are in a sense identical, not only with one another but even with the dharmin to which they are referred. This ultimate dharmin is the Unmanifest Prakṛti whose infinite modes (विकाराः) are the infinite dharmas, of which those which are present to our consciousness are called present and the rest is characterised either as past or as future. The dharmas are therefore only the varying manifestations of the guṇas of Primary Matter. That is, Prakṛti as modified in a particular manner is known as a particular dharma or vikāra.

* * *

The Yoga philosophy, especially the system propounded by Patañjali and Vyāsa, accepts in the main the views of the rival school of the Sāṅkhyas. The Yoga view of causality is therefore in all essential features almost identical with the Sāṅkhya.

From what we have said regarding Satkāryavāda it must have been made clear that the Yoga (and Sāṅkhya) notion of causality has a distinct character of its own. The word 'cause' means indeed a necessary pre-condition of a subsequent event; this meaning is common to the other systems ; it also accepts the अन्वय and व्यतिरेक as the guiding principles for the discovery of causality. But the characteristic doctrine remains to be noted.

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* धर्मिस्वरूपमात्रो हि धर्मः धर्मिविक्रियैवैषा धर्मद्वारा प्रपञ्च्येत इति। तत्र धर्मस्य धर्मिणि वर्त्तमानस्यैव अध्वसु अतीतानागतवर्त्तमानेषु भावान्यथात्वं भवति न द्रव्यान्यथात्वम् (Yoga Bhāṣya, III. 13).

If we observe the world of change and analyse it carefully we find that every change involves a double element, (a) a transitional one, and (b) a permanent one. When clay is moulded into the form of a jar, we are accustomed to speak of this moulding as an instance of change. Evidently here too there are two elements present, viz., clay and the forms that appear and disappear in it. The forms are all transitional—they come and go, but the matter, the clay for instance, is relatively permanent. It is therefore said to be the substrate of these changes of forms, through all of which its unity remains unbroken. Before the production of jar, clay had a definite form viz. 'lump', which disappeared and made room for the appearance of a new form, viz., 'jar,' and the destruction of the jar again is nothing but the disappearance of the 'jar' form and the appearance of a fresh one in its place, and so on till Universal Dissolution when Matter will absorb within itself all its forms and regain its pristine formless and blank character. But during Sṛṣṭi it stands as the background for the play of these countless fleeting forms. From this will be obvious what the relation between Matter, the dharmin, and the form, the dharma, is. Every change being a kind of causation, true causal relation must be understood as meaning the relation of the form to the matter, and *not*, as the Buddhists would contend, of one form with another. In the chain of causation, of course, one form may be spoken of as the cause of another *, but it is not by virtue of itself but of the matter which is its content. In the technical language of Sāṅkhya-

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* In popular parlance, however, one *dharma* may be described as the *dharma* of another.

Yoga all causal relation is प्रकृतिविकृतिभाव, प्रकृति being the cause and विकृति the effect.

But the meaning of the term Prakṛti is very often misunderstood. It is generally supposed to stand for the Samavāyi Kāraṇa of the Vaiśeṣika or for the material cause of the Scholastics. There is no doubt that what is meant by Samavāyi Kāraṇa falls under Prakṛti, but the latter includes the so-called nimittas as well. If we leave aside for the present the question of असमवायि कारण, which is a peculiarity of the Vai eṣika alone, we may conveniently divide Prakṛti into a two-fold aspect, viz : उपादान and निमित्त ।

Thus although Prakṛti is one and the question of causal classification is therefore out of place in Sāṅkhya, it becomes intelligible why we find mention of a two-fold division of the causal principle. This division is really a concession to the demands of empiric consciousness, and is resorted to just as in Vedānta. Truly speaking, Sāṅkhya-Yoga, as much as Vedānta, is an advocate of the identity of nimitta and upādāna. In other words, the distinction between nimitta and upādāna is a pseudo-distinction, and has no existence on the plane of Pure Prakṛti which is Universal Being and Essence. It is only when Prakṛti has evolved herself into the first stadium,-into the Mahat, that we find this distinction of nimitta & upādāna, like every other distinction, probably brought out. The function of the nimitta therefore is not to serve, as with the Vaiśeṣika, as an external principle of movement, the effectuating factor in the Universal Becoming. Prakṛti is self-moved ( स्वतःपरिणामिनी ), motion is inherent in it by nature and does not come to it from without. It ( as Rajas ) is an aspect of its Being. The efficiency of the nimitta—and this is all that we mean by causal operation — consists only in the removal of the *prohibens* in the way of Prakṛti (तमः, आवरण) and in the consequent liberation of the Vikāras, the forms, held so long in confinement within the womb of Prakṛti.

For practical purposes therefore we may distinguish in our system between two kinds of causes at work, viz., the material and the efficient. What Aristotle designated as formal causes donot seem to possess here a causal character at all. And we shall find that the so-called final causes of Aristotle fall under the category of nimitta.

Let us try to understand the position more clearly. We have said that the material cause, the Prakṛti *qua* उपादान, possesses an eternal motion inherent in itself and is not an inert substance required to be moved from outside. It possesses *in potentia* infinite forms towards the manifestation of which it has a natural proneness; but this manifestation is held in check by a retarding force which, as we shall find later on, is identical with the merit or demerit of the Jiva with whose personal experience the manifestation is directly concerned. As soon as this force is counteracted by an opposite force, e.g., merit by demerit and *vice versa*, the path of evolution becomes clear and the material transforms itself into the appropriate effect. The block of stone, for instance, contains involved within itself any kind of image, but it is able to manifest a particular image—and this manifestation is called production — only when the particular āvaraṇa which stands in the way of its manifestation is removed by the carpenter's chisel. The removal of this आवरण constitutes the efficiency of the nimitta, and is the sum and substance of all causal operation. The nimittas donot lend any impulse to the material nor can they bring out what is not implicitly contained in it. The apt illustration in the Yogabhāṣya (4.3) of the water in a reservoir on a higher level flowing of itself into the lower fields when a leakage or an outlet is made in the embankment, will clear up our point. Further, since every subsidiary Prakṛti— finite cause, is ultimately permeated by and coincident with Pure Prakṛti it naturally follows that every individual thing in nature contains every other thing potentially.*

Thus we need not seek for a principle of effectuation in Prakṛti outside of its own nature (स्वभाव ). This independence, on the part of the Prakṛti, of an extrinsic influence is called her स्वातन्त्र्य or freedom. Vijñāna Bhikṣu shows (Yo. Vār., pp. 260—1) that the only possible cause of प्रवृत्ति is the nature of the guṇas.† It is universally admitted that the particles of matter ( अणु ) are in perpetual motion in space. This motion is the vague vibration characteristic of the atoms and is to be distinguished from the definite motion which brings two atoms together ( द्रव्यारम्भक ) so as to form a substance. This motion does not serve any moral purpose, i.e., does not produce bhoga ; hence merit and demerit cannot be its cause. Nor is this motion due to a special act of God's Will, for it would be assuming too much. It is more reasonable therefore to think of it as natural. Vijñana Bhikṣu further points out that the nimittas are not found to be necessary and indispensible in the manifestation of an effect, for the Yogin, by a mere act of his will, can bring forth any thing that he pleases and for creation he does not stand in need of any human instruments. Similarly, in the beginning of creation things, e.g. seeds, are produced by God' Will merely, without the help of any positive precedent conditions, e.g. similar other seeds. All this goes to corroborate the view that the nimittas have not a direct causality in the production of an object. They help, each in its own way, to rouse the evolving power of Prakṛti, viz., Karma ( merit & demerit ) by breaking the आवरण which is a dharma opposed to itself, God's Will by breaking all kinds of आवरण beginning with the greatest one i. e., state of equilibrium, Kāla by rousing Karmas etc., and the ordinary instruments, daṇḍas &c, by retarding the possibility of manifestation of other effects.

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* The arguments in Sāṅkhya Kārikā, viz. उपादाननियमात् etc. are in consonance with our ordinary experience which justifies this restriction. An effect, to be brought forth, requires an appropriate material ( and appropriate subsidiary causes ). This is so, because we are dealing with limited Prakṛti and with limited human resources. But to the Yogin, to whom the entire Prakṛti is open, it is easy to evolve any thing from any thing.

†Cf Yoga Bhāṣya :—गुणस्वाभाव्यं तु प्रवृत्तिकारणमुक्तं गुणानाम्, under Sutra III. 13.

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But what is the aim of all this manifestation ? What is its end ? An answer to this would furnish us with what Aristotle calls final causes of creation. It is admitted that all movement presupposes an end to be realised ; without an end there can be no activity, प्रयोजनमनुद्दिश्य न मन्दोऽपि प्रवर्त्तते। This end is however variously conceived :

(a) Firstly it is pleasure or pain, which the Jīva is bound to experience in consequence ( i.e , as the fruits, फल ) of his previous Karma. In common parlance, this experience is known as bhoga and Jīva as bhoktā.

(*b*) The author of Yoga Bhāṣya sets forth that this aim is twofold, Pleasure or Absence of Pain. The former is bhoga and the latter is apavarga. It is either of these two which is the object of a man's striving (पुरुषार्थ). Pleasure or bhoga, when further analysed, would be found to embrace the 3 varieties of End, viz. Dharma, Artha and Kāma. But the Supreme End is Apavarga.

In the Sāṅkhya Kārikā, 42, it is clearly stated that the पुरुषार्थ actuates the Liṅga (प्रवर्तक). This artha is (a) experience of pleasure and pain on the ascertainment of Viṣayas ;

or (b) denial of Viṣayas on the ascertainment of distinction between Prakṛti and Puruṣa. In other words, every movement is either towards विषयभोग or towards भोगत्याग i. e. Peace. But as bhoga is the necessary precedent of त्याग, and must eventually be followed by it, sooner or later, it may be said with reason that the End of all movement is this त्याग, which in its highest form is Dissociation from Prakṛti and Self-realisation. It is the "One Event to which the whole creation moves."

The perpetual unrest and agitation which we observe around us will have their close only when this Supreme End is attained. The course of evolution, for each individual, will terminate when he realises the Essential Nature of his own Self : ततः परिणामक्रमसमाप्तिर्गुणानाम्. For apart from the individual for whom it is intended, the evolution of Nature has no other meaning. As to the further question whether Nature as a whole will ever cease to evolve we have nothing to say here. This point will be discussed in a separate paper in connection with the doctrine of Pralaya.

Without going into further detail at this point we may note that the conception of causality in Sāṅkhya Yoga is as much mechanical as it is teleological. Leaving out the other auxiliary factors and confining ourselves to Karma alone we find that it is both efficient (though negatively so as already pointed out) as well as final. Everything in Nature has its end. It will be found that even the objective inequalities in creation are not explicable except on the hypothesis of the determining principle. A thing is what it is not by chance but, as it were, by necessity. If the external world exists, and has come into being, to serve as the object of experience ( pleasure or pain ) of a Conscious Subject and would vanish for him, as soon as that purpose is fulfilled, it is easy to follow that its varieties must be occasioned by that principle, moral in its nature, which governs the varieties of such experience ; and consequently all instruments and efficient factors must work in subordination to this Supreme Governor. So far, therefore, the whole scheme of Nature, appears to be teleological.

But Karma is not the last word. It is worked off partly in natural course by fruition and is ultimately transcended by the Light of Supreme Wisdom which reveals the Self as it is and as distinct from Prakṛti This is the final term of the evolutionary series. From this point of view, too, the Scheme of Nature would be found to be pervaded by finality.

This analysis of ours leaves out of account what Aristotle calls "formal causes". Though the forms, as conceived in the Sāṅkhya-Yoga and even in the Nyāya Vaiśeṣika, are not considered to have a causal character strictly, they are not important in the order of creation, so far as the specialities of the individuals are concerned. They will be discussed elsewhere.

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It is universally admitted that the world of sensible reality is a world of perpetual change, and it is also practically assumed, as we said, that every change involves a twofold element, viz. one that is transient and the other that is relatively permanent. The material, which is the subject of change, endures, while the effect comes and goes.

A careful and systematic study of this problem of change led in ancient India to the fromulation of three broad theories viz., Ārambha Vāda, Pariṇāma Vāda and Vivartta Vāda.

The आरम्भवाद or the Doctrine of Origination (genesis) is the view of the Naiyāyika and Vaiśeṣika to whom the effect is entirely a different thing from the productive material. It is immaterial whether the effect produced is a substance or a quality or an action; in all cases it is a new thing altogether and is distinct from the substance from which it arises. This view is a necessary corollary from the असत्कार्यवाद. That the effect is found to inhere, so long as it continues in existence, in its material cause and is not capable of separation from it, simply proves that there is an intimate relation between the two and not that the two are identical.

A strong argument in favour of आरम्भवाद seems to be furnished from the Atomic theory. This theory postulates the existence of an infinite number of eternal particles of matter as the ultimate constituents of all substantial products ( कार्यद्रव्य ), that is, every product is explained as due to a peculiar combination resulting in contact ( आरम्भकसंयोग ) of these particles. And since it is impossible to consider the product as a mere grouping of the parts—and the reason why this is impossible consists in the disparity between the two, viz., that the particles are imperceptible and many, while their collection is *perceived* as *one*—it is more compatible with common sense to suppose that the parts, by reason of combination, result in the formation of the *whole* which is a *new* entity, pure and simple.

But what is the bearing of this doctrine on the problem of change? The question is whether change is predicable of the whole ( अवयवी ) or of the ultimate particles or of both.

The Vaiśeṣika says that the particles change and that the resultant whole also consequently changes. This is of the nature of chemical change and is due to the influence of tejas. The constant change going on in the world is in the end reducible to this type. In other words, if X represents the whole consisting of parts represented by, say, a, b, c, and d, we might say that the change of a, b, c, d, into a′, b′, c′, d′, by the assumption of new qualities would necessarily involve the destruction of X and of the origin of a new whole, called Y,*. This theory therefore assumes a double series of change—one in the parts and one in the whole. But why does a &c, change into á, etc. ? It is not natural, of course; for this would violate the postulate that no motion is inherent in a thing. To explain this change the Vaiśeṣika assumes the contact of a &c with the particles of tejas which penetrate into the body by means of pores (according to Vaiśeṣika, every substantial product is porous and pervious), break the contact of the atoms and produce in them a change of qualities. The atoms, as thus changed, are united again and form a fresh whole. This tejas is not only what we ordinarily call fire. It is ultimately the Solar Energy which therefore stands at the root of all physical and chemical changes in the world.

But the Naiyāyika does not agree in this. He holds, against the Vaiśeṣika, the solidity of a substantial product and its impenetrability by heat particles which act upon the body as a whole and produce in it change of qualities. Thus though the substance is constant, from its origin till its destruction, it is subject to change so far as its qualities are concerned.

The Vedāntist does not admit with the Vaiśeṣika, that difference of size ( परिमाण ) is the cause of difference of substance ; hence the *dharmī*, say, the jar, remaining the same, its former rūpa is destroyed and is replaced by a new rūpa ; similarly the animal organism remaining the same, its leanness ( कार्श्यं ) is due to falling off ( अपत्रय ) of particles and its fatness ( स्थौल्य ) may be explained as due to accretion ( उपचय ) of new particles. Thus the body of

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[c] The atoms remain the same, but their qualities change.

A when one year old would be identical with his body in his 80th year, although there may be an entire change of particles and difference of size. In other words it is the *same* body in different states ( अवस्था ).

The problem of change has received a good deal of attention and careful treatment in the hands of Sāṅkhya and especially of yoga. Pariṇāma means disappearance of one dharma, followed by the appearance of another, within the same subject or dharmī.* The word is used to indicate the process when it refers to the subject, and the result of this process when it refers to the predicate, dharma. In popular usage and in later literature this word is found synonymous with Vikāra†.

This Pariṇāma is threefold, according as it concerns *dharma*, *lakṣaṇa* and *avasthā*. The definition of pariṇāma given above is that of dharma pariṇāma. Lakṣaṇapariṇāma is the name of the change in regard to lakṣaṇa or time-sequence, i. e., past present and future. The grammatical tenses correspond to this pariṇāma in nature. The lakṣaṇa too is not conceived as an ultimate unit and is further analysable into what we may call avasthā or states, viz. new or old. Each such state is supposed to be ultimate and momentary. This kind of pariṇāma is not really expressible in language. This being the case the evolution of Nature may be supposed to consist of a series of such successive moments. In this ceaseless stream of pariṇāma everything is being carried away from the future through the present into the past. But the future ( अनागत ) and the past ( अतीत ) being nothing but Unmanifest Prakṛti, every pariṇāma is a passage from the

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* अवस्थितस्य द्रव्यस्य पूर्वधर्मनिवृत्तौ धर्मान्तरोत्पत्तिः परिणामः Yo. Bhā. III. 13.

† उपजनापायशाली ।धर्म एव च विकार इत्युच्यते, Brahma Vidyābharaṇa, p. 146 (Adv. Mañj. Ed.)

Unmanifest into manifestation and return into the Unmanifest. This represents a circle, of which one half, viz., passage from Unmanifest into manifestation, i.e. from the future into the present, stands for what is known as विसदृशपरिणाम and another half i. e. return from manifestation into the Unmanifest, i.e. from the present to the past for सदृशपरिणाम. This is true of all the three kinds of pariṇāma.

Thus the triple pariṇāma represents a series of three circles not mutually exclusive but really concentric, dharma pariṇāma being the outermost and the avasthāpariṇāma the inmost of the group. But dharma and avasthā are relative concepts merely and are identical. The author of Yoga bhāṣya clearly states (111. 13) that the change of dharma in a dharmī, of lakṣaṇa in a dharma and of avasthā in a lakṣaṇa is the same process, being characterised by modification of the substance and involving a transition of states ( अवस्था ).*

This change is incessant and uncaused. It pervades the whole realm of Nature It is said that nothing that is made of guṇas is ever, even for a single moment, at rest and this for the simple reason that guṇas are by nature fickle.† Even in the state of Dissolution when the manifested Universe is resolved into Prakṛti, this change or mutation still continues—this is सदृश परिणाम ।‡ It is only Puruṣa or the Self which is truly immutable, being beyond Prakṛti.

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* धर्मिणोऽपि धर्मान्तरमवस्था, धर्मस्यापि लक्षणान्तरमवस्था इत्येक एव द्रव्यपरिणामो भेदेनोपदर्शित इति। Again: परमार्थस्तु एक एव परिणामः। Balarāma points out (p. 210, f. note 3) that the three pariṇāmas are really cases of अवस्थापरिणाम or they are all to be labelled as धर्मपरिणाम, since all the mutations are in the Dharmī as their permanent abode.

† धर्मलक्षणावस्थापरिणामैः शून्यं न क्षणमपि गुणवृत्तमवतिष्ठते। चलं च गुणवृत्तम्। 70. Bhā. III. 13.

‡ P. Brahmānanda Bhāratī, in his सरलसांख्य, p. 17 seems

Now a dharma or state, unless it is present, must be either past or future; but in all these states the dharmi of which these are affirmed, is constant. A dharma is a particular Śakti pertaining to a substance and is inferred to exist in it from its action, viz., from the production of a particular effect. It is subject to mutation, but is never annihilated (cf conservation of energy). The present or उदित (actual) dharma is one which is described as "स्वव्यापारमनुभवन्" and "सव्यापार"; this is the object of our immediate consciousness, and is differentiated on the one hand from the past or शान्तधर्म which has ceased to be active (कृत्वा व्यापारानुपरतः) and on the other from the future (possible) or अव्यपदेश्य धर्म which has not yet commenced to operate. Of these dharmas the present only is felt as distinct (विशिष्ट) from Prakṛti by reason of its manifest character, and one might say that this alone exists. And we know that the Buddhists actually denied the others. The past and the future dharmas are not directly known. The truth in the matter seems to be that these dharmas rest in Prakṛti as in union with it and are not distinguishable, not only from one another but even as dharmas. Their essence is the essence of the Dharmī.

Hence it follows that the dharmas are two-fold, according as they are manifest (अभिव्यक्त) or unmanifest (अनभिव्यक्त) and the Dharmī is the substance which persists (अन्वयी) in them both and consists of a double nature viz, it is a सामान्य as well as a विशेष i. e., as a सामान्य it persists in and is identical with शान्त and अव्यपदेश्य dharma and as a विशेष it per-

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to deny that in the state of equilibrium (साम्यावस्था) there could be parināma. He says that the admission of pariṇāma, even if सदृश, would militate against the theory of Equilibrium of Guṇas in Pralaya, for परिणाम (वैषम्य) and साम्य are contradictory. Bhāratī's objection seems to me unfounded. It rests on a misunderstanding of the meaning of pariṇāma.

sists in and is the same as उदितधर्म । In other words, every effect or manifest product, in so far as it is a manifestation, is an individual ( विशेष ) and considering its past and future unmanifest condition is identical with the Universal Being or Prakṛti ( सामान्य ). The relation of cause and effect being identity in difference ( तादात्म्य ) every effect has an individual character (derived from its difference from cause) and stands by itself, distinct from everything else in creation and has also a Universal character ( derived from its identity with cause ) by virtue of which it is perceived as one with everything else in nature.

The above will suffice to bring out the meaning of the statement that all things are essentially identical and consequently all are in all The root principle of Yoga Philosophy and practice is thus found to be a recognition of the fact that every thing is full of infinite possibilities, and personal exertion is meant simply to give them, by removing the obstructions, actuality. As to how this is done we shall discuss elsewhere.

The perpetuity of flux is thus found to be an established fact in Nature. Our mind as well as the outer world are both equally fluent. Let us now try to discover how these momentary changes contribute to various results. The question is—if the Dharmī is one and suffers changes of state moment by moment, it follows that these changes are all uniform, and in that case how are we to account for the varieties of creation ? The origin of multiplicity in effects from one or uniform cause is an illegitimate hypothesis. Concerning this it is said that diversity of modification is due to diversity of Krama. Krama is the relative sequence between one dharma and another (dharma includes lakṣaṇa and avasthā also) and is ultimately a unit of change. It is the sequence of kṣaṇas ( क्षणानन्तर्यात्मा ). One dharma may be said to be a krama of another provided that it immediately follows it. The krama of dharma and lakṣaṇa pariṇāmas is sensible, but that of avasthā pariṇāma is extremely subtle and supersensuous. None but a Yogin can perceive the subtile change that a substance is undergoing every moment. But such kramas, though ordinarily imperceptible, are not to be ignored. Their cumulative effect, from which they are inferred, is great. It is their permutations and combinations, endless in number, which give rise to this manifold of our sensible experience.

Thus understood krama is a movement of the guṇas. Referring to a dharma, we may define krama as its movement, from moment to moment, from the अनागत state towards manifestation (वर्त्तमनता) and then towards अतीत. In the अतीत or शान्त stage of the dharma, where all movement comes to a stand—still, there is no krama* and it is for this reason that it is described as irrevocable. That krama belongs to the present dharma is universally admitted. But the Yogin points out that even the anāgata dharma, a dharma which has not yet come to be manifested and is yet in the womb of Prakṛti as an अव्यपदेश्यधर्म, possesses krama and is subject to the law of fluctuation. Had it not been so, an अनागतधर्म would never have become वर्त्तमान at all. An अनागत dharma becoming वर्त्तमान is tantamount to the evolution of Primordial Nature. A detailed study of this point and the secrets of creation, will be furnished in another paper, when it will also be shown that just as lapse into the past is the final term of life-history of dharma, so the अनागतावस्था of the dharma is the initial term of its history.

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* Yoga Bhasha, III. 14.

The question is: How, then, can the Yogin call back the past, though he does not usually call back, but revokes only a phanton, an exact duplicate, of the past?

And this अनागतावस्था may be conceived firstly (1) as Prakrti and then (2) as an Ideal Dharma (बोध) i.e. the same dharma when it is in the Mahat. (Cf. the original meaning of the term conception.)

The philosophy of krama is very deep. It is said that the guṇas being eternal and always in motion by nature, the krama of their modification never comes to an end. Their pariṇāma is eternal. But their evolutes viz. buddhi etc. are not permanent. That is, the Krama of every substantial product ceases one day when it becomes dissolved. Every product, buddhi downwards, is meant to serve as an end or a means to an end, of the Self (be it भोग or अपवर्ग) and is thereby justified in its existence. The realisation of पुरुषार्थ is the *raison d'etre* of the existence and continuance of the manifested world, and as soon as this is accomplished (finally by Dharmamegha) it is resolved into its components, viz., the guṇa particles (cf. Yo. Sut. IV. 32). But this is for one man—for him only who has reached his goal. There are other Jivas who may be still in the middle of their journey, some who are still moving outwards in search of भोग or earthly enjoyment and some who, having turned back upon them, are indeed moving inwards but are yet on the path, struggling in pursuit of the saving knowledge. For such Jivas the manifested world (दृश्य) will have to continue. And the number of Jivas being infinite there will never come a time when there will be no more a manifest, objective world (Yo. Sut. II. 22).

But this does not violate the possibility of periodic dissolution of the world.

We have seen above that the krama of modification of the दृश्य ends as soon as the Puruṣārtha is realised. But as the krama has an end, has it also a beginning? The दृश्य being only a product or evolute of the relation between Puruṣa and Prakrti, the question recurs—what is the origin of this relation and when did it originate ? We pointed out that the अनागतावस्था is the beginning of the krama of the dharma. Does this अवस्था refer to a definite point of time or is it simply a vague assumption following from the necessity of thought alone ? Put more pointedly the question refers itself to the moral explanation of the bondage and consequent limitations imposed on the Self. In reply to this pertinent question, the Sāṅkhya Yoga, like other kindred systems, asserts that we can not posit an absolute beginning of this series of kṣaṇas, that since every kṣaṇa is explicable only on the hypothesis of a preceding kṣaṇa no absolutely first kṣaṇa is conceiveable. The casual series must be held to be infinite *ab ante.*

Moreover, what is the nature of this relation between Puruṣa and Prakṛti (i. e between Puruṣa & Sattva) ? The relation is given in every judgment of ours, which is a function ( वृत्ति ) of the buddhi and implies a co-ordination of subject and object. Such a co-ordination of two distinct and mutually exclusive principles is not possible except through confusion or non-discrimination (अविद्या, विपर्यय). Thus this relation, which is the source of phenomenal consciousness and misery, is due to मिथ्याज्ञान! But the origin of मिथ्याज्ञान can be explained only as a consequent of another मिथ्याज्ञान and that of another, and in this way the series would be stretched infinitely backwards and we would not be able to arrive at its first term at all. The guṇas being always in relation to the Puruṣa, ( because both are eternal ) * their effects too much always have been in relation with it: **धर्मिणामनादिसंयोगाद्ध धर्ममात्राणामप्यनादिः संयोग :** ( Pañchaśikha in Yo. Bhā. II. 22 ).

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* This is the doctrine of अनादिसंयोगः दृग्दर्शनशक्त्योर्नित्यत्वादनादिः संयोगो व्याख्यात :—Yo. Bhā. II. 22. The Naiyāyikas, as a rule, reject the possibility of contact being without a beginning. According to them संयोग, which is अप्राप्तिपूर्विका प्राप्तिः, must be due to motion, either of one or of both. But अजसंयोग also is sometimes

But the usual argument set forward in support of the beginningless character of **संसार** consists in the inexplicability of the inequalities of pleasure, pain etc. on the hypothesis of a beginning in time.

The inevitable conclusion which follows from the above is practically a confession of ignorance. However smartly we may tackle the problem, the mystery remains ever the same. Different attempts at solution simply change the form of the difficulty, but the mystery is never fully cleared. Yet from an intellectual and rational point of view, the doctrine of **अनादित्व** remains the only valid theory on the point.

This doctrine implies that there has never been a first *Karma* or a first **मिथ्याज्ञान**, in the absolute sense of the term. There has always been a push from behind. The difficulty of admitting a first Karma would be great. Assuming pluralism and absence of limitations, all Karmas would be uniform in the beginning and differences would never ensue. According to such a view the Selves, before they fell into the meshes of Prakṛti, must have been in a free condition, joyous and pure. Why then should they have acted at all ? And even if they had acted, why should one have acted differently from another ? In such a theory differences have to be assumed in the very beginning, and since these differences are self-explained and do not require an extrinsic ground of justifica-

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admitted. Cf. Nyāya. Vār. p. 466. For eternity of saṁsāra see Ny. Bhā, 3.1. 27; 4.1.2; Ny. Vārt 1.1.2; 1.1.19. Ny. Mañj., p. 499. The relation which is expressed in Yoga as a contact between Puruṣa and Prakṛti (or rather sattva i.e. chitta) appears in Nyāya as the contact of the Self with the manas (Ny. Mañj., p. 499) or with the body (Ny. Bhā. 3. 1. 27).

tion; why not extend the same lower down in the series? But this would upset the causal principle and end in a chaos of thought. Better, therefore, than introducing differences on the *Eternal Planes* ( नित्यधाम ) it is to explain them in the usual way by referring them to the adequate causal conditions working *in time.* An endless succession is not an illegitimate hypothesis.

Unless the causal series is admitted to be infinite, that is, if the world be supposed to have a beginning in time, we must have to take recourse, as already noted, to the doctrine of accident and chance (निर्निमित्तवाद). In that case, the experience of pleasure and pain on the part of the Jīvas would remain unexplained and there would follow the defect of अकृताभ्यागम or fallacy of unmerited reward and punishment. Moreover, the doctrine would involve the possibility of the Free Souls also returning to bondage. Śaṅkara expresses himself on this point thus: आदिमत्त्वे हि संसारस्याकस्मादुद्भूतेर्मुक्तानामपि पुनः संसारोद्भूतिप्रसङ्गः, अकृताभ्यागमप्रसङ्गश्च सुखदुःखादिवैषम्यस्य निर्निमित्तत्वात् ( Brah. Sūt. Bhā. II 1 36). These inequalities are not explicable through Īśvara and through mere अविद्या ( without Karmas following from the Vāsanās of the Kleśas, viz., राग, द्वेष and मोह ) which is uniform in all ( cf. also Śaṅkara Bhā. 1. 3. 30 ).

This is the burden of infinite Karma which every Jīva bears on his back. To escape from this is to obtain permanent Peace. How this may be done need not be discussed at this point. The question why one Jīva differs from another morally, since all are equally burdened with अनादि Karma of an infinite kind, seems to be solved by the consideration of succession ( Krama ) in the development or ripening of the Karmas. The Karmas being infinite, their permutations and combinations too are infinite. Hence the difference in the different series of lives.

This view is not universally admitted even in India, though undoubtedly this is accepted in all the recognised systems of Indian Philosophy. For there are schools which, while conceding that the world as such has neither beginning nor end, deny that a particular Jīva's course of existence in it should also be beginningless. They mean to say that as the Jīvahood has an end at a definite point of time, it begins also in time. It is inconceivable that a line, which is known to end should have no beginning. If अनादि is intended to mean that we do not *know* when the series begins, simply because our own vision does not reach far back, it is all right; it would merely amount to a confession of the fact that our eyes are dimmed with avidyā and cannot discover the beginning; but if it means, as it undoubtedly does, that it has no beginning at all, it is nonsense. These thinkers teach that the Jīva is originally pure and free, and essentially identical with Īśvara, but that through some fault on his part he was thrown into the vortex of saṁsāra in which he has been rotating ever since and from which he will be able to escape only when the vega with which he fell ( which itself was determined by the intensity of the original fault ) will have been exhausted. The intensity of his fault determines the length of his stay away in Saṁsāra. His original fall and his final emancipation are both due to the action of Divine Will, the former known as निग्रहशक्ति and the latter as the अनुग्रहशक्ति ( Power of Grace ) of the Supreme Lord.

The question how the Jīvas, all pure and spotless at first, are at all capable of transgression, and even then why they transgress in different ways, is answered by saying that they are all 'free' ( स्वतन्त्र )at this stage and that their actions are all self-determined. The different series of lives of the Jīvas may be explained by their original differences on the Eternal Plane. These difference donot require to be explained from without. They follow from the essential difference in the nature of the Jīvas. For according to this view the Jivas are different from one another, so far as personality is concerned, although each of them may be pure, free, etc. equally with the rest. This is a doctrine characteristic of all the pluralistic systems.

# VII—DISCIPLINE BY CONSEQUENCES IN ANCIENT INDIA

BY

## G. L. SINHA

To educate the child according to a certain ideal has ever been the aim of the teachers and the parents. The ideal has been different in different ages, but there was one point regarding which there seems to have been an agreement of opinion for a considerable time in the west, and that was the validity of the 'doctrine of restraint' in education.[1] Locke and the other ancient western educators believed in the original depravity of the child's nature. The early manifestations of the self-activity of the child were for them an expression of the barbarous and the semi-barbarous tendencies of the primitive man mirrored in him by the force of the law of inheritance; and the true education, according to them, was one which consisted in the suppression of these tendencies and the subsequent implantation in their place of good habits of right acting and right thinking by the force of authority and compulsion.[2]

Such a view of education resulted ultimately in making the moral training (and not to a lesser degree the mental training also) a training by rod and coercion[3]. The school became a scene of loud and continued moral discourses, threats and castigations. Discipline came to mean immobility, moroseness and timidity, with the result that instead of being a source of human progress, it, by subjecting the boys to a despotic form of government and an intercourse regulated by brute force, resulted ultimately in a permanent moral and constitutional depression.[1]

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[1] *Education*, Spencer ,chapter III.
*Rousseau*, Mrs. Oliphant, chapter IX.
*The Great Schools of England*, Howard Stauton.

[2] *The Doctrines of the Great Educators*, Robert, R. Rusk ch.VII.

[3] *Rousseau*, Mrs. Oliphant, chapter IX.

Rousseau for the first time revolted against this doctrine of restraint. He went to the other extreme, and against the doctrine of the original depravity of the child's nature he preached the doctrine of the original goodness of man[2]; and the real education for him was only that which allowed nature to develope without a check. His negative education consisted in perfect freedom and complete absence of any authority. So far as the moral training was concerned it was, he said, an absurdity to teach morality to the child on the ground that the notion of right and wrong developed only in the later years of life[3]. To teach discipline, therefore, he urged the principle of 'dependence on things, which is the work of nature' and not dependence on man which is the work of society.[4] 'Let him (the child) find upon his proud neck the heavy yoke which nature has imposed upon us, the heavy yoke of necessity under which every finite being must bow'[5], he further adds. And finally he says that the punishment should never he inflicted as punishment, for the child has no notion of right and wrong; but he should suffer the natural consequences of his folly and passion.[6]

Here we find the first glimpses of the principle of discipline by consequences.

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1. *Education*, Spencer, chapter III.
2. *The Doctrines of the Great Educators*, Robert R. Russel, P. 142.
3. *The Doctrines of the Great Educators*, Robert R. Russel, Chapter VIII.
4. *Rousseau*, Emite, Everyman's edition, p. 49.
5. " " " " p. 55.
6. " Mrs. Oliphant,—p. 158.

The problem was later on taken up by Spencer who made a very clear and comprehensive exposition of it, and showed to the world how the natural punishment for offences could be the only true and the right way of making a child a really moral being. He based his arguments on the original conception of right and wrong. According to him any conduct whose total results immediate or remote were beneficial was a good conduct; while one whose immediate and remote results were bad was a bad conduct. And if, he said, this was the test of a right or wrong action, certainly one's own experience of the beneficial and the detrimental effect of a particular conduct was the only sure way to distinguish between what was moral and what was immoral[1].

Madam Montessory, the great Italian authority on pedagogical anthropology and experimental psychology, has recently carried on a number of very interesting investigations on the subject of moral training and her views agree fairly with those of Rousseau and Spencer. The principle of freedom and liberty which was only dimly and imperfectly seen by Rousseau has received an elaborate scientific treatment at her hands and we are in possession of a definite and sure method. "Discipline must come through liberty," says she. It is in activity and work and not in immobility and passivity that the child, according to her, gets the notion of right and wrong.[2]

Let me now invite the reader's attention to the views of the ancient Indian philosophers regarding the problem. Patañjali, the famous writer of the Yoga Aphorisms, finds the origin of all our actions in the primary feelings of pleasure and pain. There is a natural tendency in man, says he, to detest doing what has pain as its result; while he attaches himself to those actions which have happiness in the end.[1] This feeling of pleasure and pain has been the basis of all Dharma among the Hindus begnnining at first in relation to one's body and the senses, and then to the life of the society and ending finally in the determination of its nature with reference to the happiness and the misery of the soul.[2] Obviously then with such a basis of morality it would be perfectly logical to infer that at least in the early stages of human evolution when a man's main concerns are his physical relations and the objects of his senses, one's own experience of the results of one's actions would certainly be the best teacher of what is to be done and what is not to be done.

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[1] Education, Spencer, chap. III.

[2] *The Montssori Method*, English translation by Anne E. George.

The same conviction is fully borne out by the following. Dharma, Artha, Kāma and Mokṣa were considered as the four great objects of the human soul[3]. An ideal life was one which was the resultant of the experiences of all of them and an ideal scheme of life was one which secured a thorough realisation of the nature of each of them, through a process of self-experience and self-learning. And when we consider the growth of moral consciousness in the early stages of life the opinion is quite definite and clear. The desirability and the undesirability of a particular conduct was to be understood only by the agreeable or disagreeable result of it by virtue of its dynamic consequences and not through a course of non-indulgence or moral philosophising upon it. Activity and not passivity, action and not inaction, sympathy with the natural instincts and not the

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1. *Yoga Aphorisms*, commentary by Vyāsa, II. 7 and 8, *Panini Office*.

2. *Laws of Manu*, ii. 224.

See also—*Bhagavad Gītā* IV. 14 to 23.

*Public Administration in Ancient India*, Banerjee, p. 275.

3. *Sukranīti*, III. 4—5.

suppression of them, internal development and self-discrimination and not imposed understanding and forced knowledge, freedom and not restriction, nature and not man—such were the conditions that were necessary. Thus says Viṣṇu Bhāgavata:—

"The soul realiseth not the sharpness of the objects of the senses without the personal experience of the same. It is better, therefore, that he should find renunciation by himself and not that he should be persuaded into the belief through the instruction of others."[1]

Now it remains to show the practical application of these principles in education. Manu in his chapter on 'studentship' of his famous Smṛti makes it clear both to the teacher and the taught that non-indulgence and abstinence can never be the right means to secure the restraint of the organs of the senses. Suppression or avoiding of a particular desire or tendency in its infancy or vigour, before it has had the enjoyment and full activity which is due, may lead to a temporary satisfactory result but it can never amount to a permanent cure. What happens is this that the thing ultimately slain by violence is not really dead, but withdraws for the time into the Prakṛti which sent it forth, gathers an immense force and returns with extraordinary violence ravening for the rightful enjoyment which was denied[2] to it. On the other hand, when it is accompanied by the realisation of its true nature acquired as a result of one's own experience of it during the process of its expression it will surely tend to decay and die a natural death. Thus says Manu[3]:—

Those organs attached to sensual objects cannot be cured so much by non-indulgence as ever by knowledge.

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[1] *Vishṇu Bhāgavata,* VI. V. 41. (Bhagawan Das).

[2] *The Ideal of Karma Yoga,* Aurobindo Ghose, P. 59—60. For original reference see *Bhagavata Gitā,* III. 5-10.

[3] *Laws of Manu,* Ganga Natha Jha, M. A., D. Litt., II. 96.

Again, Śukrāchārya also, while talking about the education of the princes, says that knowledge is the only right means to secure right discipline. He compares the restraining of the senses with the training of an elephant which is running to and fro in a wild manner. Thus says he :—

> "One should bring to bay or discipline, by the hook of knowledge, the elephant of the senses which is running to and fro in a destructive manner in the vast forest of enjoyable things."[1]

Kauṭilya recommends the principle of non-indulgence for the restraint of the organs of the senses by putting the child in an environment which is unsuitable for the exercise of the lower desires of his and says that he should be taught of righteousness and wealth and not unrighteousness and non-wealth. In this respect he very nearly reaches the same views as those of Patañjali who says that particular sets of saṃskāras are capable of excitation only when the circumstances are favourable; in an adverse or hostile environment they are suppressed[2]. He also holds the importance of learning and even of punishment as a great factor in the process of the restraint of the organs of sense. But it was perfectly clear to him that there were cases in which all these failed and the only way left for the teacher was to have recourse to the principle of natural punishment. Thus we find him saying :—

> "There can be", says Kauṭilya, "no greater crime or sin than making wicked impressions on an innocent mind; just as a fresh object is stained with whatever it is brought in close association, so a prince with fresh mind is apt to regard as scientific injunctions all that he is told of. Hence he should be taught only of

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[1] *Sukraniti* I, 193—94.

[2] Pataṇjali, *Yoga Sūtras* II. 10 and 16, Vivekanand.

> righteousness and of wealth (Artha), but not of unrighteousness and of non-wealth. Classmate spies shall be so courteous towards him as to say 'thine are we'. When under the temptation of youth he turns his eyes towards women, impure women under the disguise of Āryas shall, at night and in lonely places, terrify him; when fond of liquor, he shall be terrified by being made to drink such liquor as is adulterated with narcotics (yogapāna); when fond of gambling, he shall be terrified by spies under the guise of fraudulent persons; when fond of hunting, he shall be terrified by spies under the guise of highway robbers; and when desirous of attacking his own father, he shall, under the pretence of compliance, be gradually persuaded of the evil consequences of such attempts by telling: a king is not made by a mere wish; failure of thy attempt will bring about thy own death; success makes thee fall into hell and causes the people to lament (for thy father) and destroy the only clod (*ekaloṣṭavadhaśca*, i. e. thyself)."[1].

As mentioned before the problem presupposes activity and action. If the correction of man in the early stages of his life, when the faculties of reason and judgment have not developed to the required stage of efficiency, is to be secured by a system of experiences acquired by his own self it is obvious that freedom and liberty of action must form the chief basis of his early moral education. There has nowhere been a more emphatic and a more comprehensive statement of such a principle than what is given in the Hindu scriptures. "Action", says Kṛṣṇa, "is an inherent property of the Prakṛti and by the matter-born Guṇas one is forced against his will to work."[1] In the same continuation we find him saying to Arjuna, "Action is inherent. Do it then. Action is verily superior to non-action. Without action thou shalt not be able even to sustain bodily existence."[2] And finally he takes the cases of those men who have attained the stage of self-realisation and shows with logical and scientific argumentations how even such men are compelled to yield to the law of nature and follow its directions and how by violation and disobedience they come to grief and fail to achieve the very object they work for.[3]

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[1] Kauṭilya, *Artha S'āstra*, R. Shama Sastry, pp. 38—39.

If we wish to be more scientific and demand an explanation in terms of psycological facts it is not missing. According to the Doctrine of Karma every action that a man does produces a sort of ripple in the mind. The disturbance dies out after some time, but the effect remains there; the more frequently that particular action is repeated and the wave excited the greater grows the potency of the effect till the stage is reached when it becomes permanent. In this condition that effect is known Saṃskāra. It is the seed of that action in subtle form, and sinking below the surface of consciousness waits there for an opportunity to unfold itself and find an expression into the corresponding action.[4]

The power of the Saṃskāras is really very great. Once produced they cannot be destroyed by ordinary means. The only easy method to finish them is to exhaust them out by action. Any restraint or suppression specially in the early stages of the life of man when his power of self-control is weak, is simply a temporary check and does very little indeed towards the cessation of their dynamic force. All our natural tendencies which we inherit from nature and also the habits which we form afterwards are due to a certain set of Saṃskāras acquired during the evolution of the race or during the life of the individual. They become a part of our nature. Their potential power is immense. They become the origin of all our desires and tendencies. All our actions originate from them. The right education, therefore, is that which has its beginning in the mass of Saṃskāras with which a man is born and does in no way attempt to kill them or destroy them. Thus says Bhagavad Gitā :—

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[1] *Bhagavad Gītā*, Rāmānujāchārya's Commentary, III. 5.

[2] ,, ,, ,, ,, III. 8.

[3] ,, ,, ,, ,, III. 33.

[4] For the above doctrine of Saṃskāra see Patañjali's *Yoga Sutra*, Commentary by Vyasa, II. 11, 12, 13, by Rama Prasad, M.A., Paṇini Office.

"Even the Jñānī follows the bent of nature. All creatures follow nature. What can restriction avail ?"[1]

"None can attain the actionless (*naiṣkarmya*) state by cessation from action ; not by cessation merely doth he attain perfection."[2]

In conclusion let me mention here that this essay has not been written with a view to deal with the entire problem of discipline. The real conception of it as advocated by our ancient Ṛṣis is a subject too complicated to be discussed here and would demand the consideration of factors which do not fall within the scope of this short paper. There has been made an attempt to deal with only a part of it. Discipline by consequences was merely one of the many factors in the scheme of the moral and spiritual training. Its efficiency in the early stages of the human life was beyond question and it was definitely known that there could not be any real development of character unless and until the activity of the senses was allowed to have full play.

This principle has been emphasised more than once in these pages. But we must also remember the great saying of

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[1] *Bhagavad Gitā*, III. 33.

[2] ,, ,, III. 4.

Manu that "Desire never rests by enjoyment of lust, like as fire surely increases the more by butter (offered in it)."[1] This is obviously an exposition of the doctrine of restraint. To many this will appear as a paradox and a contradiction. It appeared so to our ancient sages also. They realised this difficulty and ultimately discovered that the real path was one which was between these two. They said that sense enjoyment was a necessary item in the process of soul-growth but it had its limitations ; along with it was to be developed the power of self-control and the restraint of the organs of sense.[2] True discipline, according to them, therefore, was one which while fulfilling the natural demands of our desires and feelings secured also the control of lust, anger, greed, vanity (Māna), haughtiness (Mada) and overjoy (Harṣa).[3] From the control of the organs of sense there grew the desire for the right performance of Dharma, right performance of Dharma led to non-attachment and non-attachment opened the path of Ātma-vision. Both the world and the heaven having been rendered available, perfection was at once made easy and possible. Such was the conception of discipline of our ancients.

Thus says the Bhagavad Gītā :—

"Who, Arjuna ! curbing the senses by the mind disinterestedly practises Karmayoga, with the organs of action, he is great."[4]

"Hence work unconcerned as if it were a duty to be discharged. The person so unconcerned verily reaches the Transcendent."[5]

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1. *Laws of Manu*, II. 94.
2. *Laws of Manu*, II. 88.
   Kauṭilya's *Artha Śāstra* by R. Shama S'astry, p. 12.
3. ,, ,, ,, ,, ,, ,, p. 12.
4. *Bhagavad Gītā*, III. 7.
5. ,, ,, III. 9.

Thus says Manu :—

"Any act of an unselfish man is never at any time seen here; for whatever one does, that is the act of selfishness."[1]

"(Yet) one rightly occupied in those (acts) goes to the world of the immortals and gets all (his) desires here as hoped for."[2]

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1. *Laws of Manu,* II. 3.
2. " " " II. 4.

# VIII—HISTORY OF THE ORIGIN AND EXPANSION OF THE ARYANS:

## I Dyau and Pṛthivi

By Atul Chandra Ganguly.

The ideas of unity amid diversity, of order amid change, have long been growing and gaining ground as a conception of the world process ; and there is a mass of innumerable facts and indications, spiritual, psychological, biological and geological, which goes to establish that general idea, which we now all more or less share, of the universe as not only orderly, i. e. following one universal law, but also in process of change, in process of development. It has been an accepted creed among the intellectually developed men that the seed of all life and being was one ; along with this has grown the idea that the principle of development is one, and the structural ground-plan the same, out of which have evolved an opulent number of varieties by an ascending order which passes up through fine but still very distinct gradations from the crude to the complex, from the less organised to the more organised, from the inferior to the superior type. In a word, we can no longer believe that these suns and systems were hurled full-shaped and eternally arranged into boundless space and all the numberless species of being planted on earth ready made all of a sudden. The world, before us, the trees, all life and being, are the many ways in which one plasmic seed, one developing ground-plan, has disposed itself by process of evolution.

Similarly evolution is not less true of the earth and its features than of the multitudinous tribes of plants and animals that clothe and people it, and it has come to be seen that this globe, the earth on which we live now, with all its endless variations of surface, of continents and oceans, of seas and islands, of vast plateaux and lofty mountain ranges and extensive plains, with their ravines and cataracts, their great lakes and stately rivers, was subject to perpetual change. There was a time when 'the earth was without form and void', and owing to vapour-laden atmosphere, 'darkness was upon the face of the deep'.

Our earth has passed through several distinct geological stages. The whole solar system once formed a vast nebula, consisting of glowing gas; and our planet was slowly shaped into a globe out of this primitive nebula. During the earliest period, the Archaen or Eozoic, the earth acquired its atmosphere and oceans. In the next, the Primary or Palaeozoic Period, it was mostly covered by seas, and well defined lowest forms of life of marine origin made their appearance. The Secondary or Mesozoic Period marks the emergence of dry land and saw the further development of animal life on land as well as in sea. The emergence of the dry land was slow and gradual, when at last in the Tertiary or Cainozoic Period the earth received its final stamp. It was also in this period that man first made his appearance. Then followed the present age, the Quaternary or Post-tertiary Period.

Now these have again been devided into eras, and the names of the sub-divisions of the various systems given below are those generally accepted.

1. Archaean Period

| | |
|---|---|
| 2. Primary or Palaeozoic Period | Cambrian |
| | Silurian |
| | Devonian |
| | Carboniferous |
| | Permian |

| | | |
|---|---|---|
| 3. | Secondary or Mesozoic | Triassic<br>Jurassic<br>Cretaceous |
| 4. | Tertiary or Cainozoic | Eocene, Oligocene<br>Miocene,<br>Pliocene |
| 5. | Quaternary | Pleistocene or Glacial<br>Recent or post-glacial |

We have already seen that the earth was mostly covered by seas during the Palaeozoic Period ; but there is positive evidence that much of north and east of Asia has been land since the close of this age. This land mass covers a part of South-eastern Siberia, the whole of Mongolia, and a part of Western China. The Triassic deposits of the Verkhoyausk range on the north, Japan, Eastern Manchuria, Eastern China on the east, the Western Trianshan on the west, and Tibet, Eastern Turkistan, South China on the south, give us some idea of its limits.

At an early geological epoch there existed two land masses in Asia "The northern land mass begins in the north with the area which lies between the Yenisei and the Lena. Here the folded Archaean rocks are overlaid by Cambrian and Ordovician beds, which still lie for the most part flat and disturbed. Upon these rest patches of fresh water-deposits containing numerous remains of plants. They consist chiefly of sandstones and conglomerates, but include workable seams of coal. Some of the deposits appear to be of Permian age, but others are all included under the general name of the Angora Series. Excepting in the extreme north where marine jurassic and cretaceous fossils have been found, there is no evidence that this part of Siberia has been beneath the sea since the early part of the Palaeozoic era" (p. 743, Vol. 2, Ency. Britt.). Again "south and east of the Palaeozoic plateau is an extensive area consistidg chiefly of Archaean rocks, and including the greater part of Mongolia north of the Tianshan. Here again there are no marine beds of Mesozoic or Tertiary age, while plant-bearing deposits belonging to the Angora series are known. Structurally the folds of this region are of ancient date...............Further south, in the Chinese provinces of Shansi and Shensi, the geological succession is similar in some respects to that of the Siberian Palaeozoic plateau, but the sequence is more complete. There is again a floor of folded Archaean rocks overlaid by nearly horizontal strata of Lower Palaeozoic age; but these are followed by marine beds belonging to the Carboniferous period" (p. 743, Ibid).

The western half of Siberia and the lower basins of the Yenisei and the Lena at a relatively recent period formed the bottom of a mighty ocean. This ocean, cutting into Asia from the north, extended as far as the plains, where the Aral and the Caspian seas still remain to commemorate its existence, and the waters of this ocean were connected with those of the Maditerranean sea. This part of Siberia "stretches from the Aral-Caspian depression to the lowlands of the Tobol, Irtysh and Obi, and thence towards the lower parts of the Yenisei and the Lena" (Ency. Britt., Vol. 25, p. 11 d, eleventh edition).

Now we can perceive that in the whole of the Northern landmass which has been dry land since the close of the Palaeozoic Period, the greater part of Mongolia north of the Tian-shan, which alone consists of Archaean rocks, was the first to emerge from the sea; for it must be borne in mind that the Archaean Period is the first geological epoch. It can, therefore, be safely concluded that the whole of the continent except this extensive area lay submerged beneath the sea in Primary times; and we know that the first terrestrial animals, true air-breathers, appeared during the middle of this period. Hence from what I have said before I think I am justified in the conclusion that Mongolia is the oldest life-producing land in the whole world and that the first land creatures made their appearance here, where the work of evolution of animal life went on untill the creation of man without any interruption. Here also are found the patches of fresh water deposits containing numerous remains of plants.

With regard to the Asiatic origin of the domestic animals, Professor Johannes Ranke writes thus in Harmsworth History of the World (Vol. I, p. 159) :—"A survey of the palaeontology of the domestic animals shows that they come from wild drift species which—at any rate, as regards the ox, horse and dog—are now extinct, so that these most important domestic animals now exist only in the tame state. Some of the domestic animals came from Asia, and according to Von Zittel, were imported into Europe from there ; this applies to the peat-ox and the domestic goat and pig. The Asiatic origin of the domestic horse and sheep is probable, but not proved ; the sheep is found wild in south Europe as well as in Asia. The terpoon, a breed of horse very similar to the wild horse, lives in herd independent of man on the steppes of Central Asia. This has been indicated as being probably the parent breed of the domestic horse, and the origin of the latter has accordingly also been traced to Asia." "One thing is certain", continues Professor Ranke, "a considerable number of animal forms that co-exist with man in Europe at the present day—for instance, almost all the forms of our poultry and fine kinds of pigs and sheep—have originally come from Asia. Our investigations show a similar state of things even in the Neolithic Period."

As regards the original home of the mammoth and its companions, the same authority writes—"One thing is certain,—namely, that the northern borders of Siberia were not the real home of the mammoth and its companions ; the original habitat of these animals points to far interior of Asia, particularly to the wild tablelands, where they so far steeled themselves in enduring the climate that in the close of the glacial period half of the world became accessible to them" (Ibid, p. 122).

Hence we find that all the results of modern geological and archaeological investigations point to the fact that the Mongolian land mass which in the secondary period covered a large area of land, is the original home of almost all the domestic animals as well as the mammoth and its companions. With all this in our mind the conclusion is irresistible that man, too, was evolved and made his first appearance here in Mongolia. The following extract from the writings of Professor Ranke (p. 125, Ibid) will be found interesting in this connection: "It is in the middle of this great drama of a gigantic animal world struggling and fighting for its existence with the superior powers of nature, during the Inter-glacial period of the Drift, that man suddenly appears upon the scene in Europe like a 'deus ex machina'. Whence he came we do not know. Did he make his entrance into Europe in company with the Drift fauna that immigrated from Central Asia, or have we to seek his original home in the New world ?"

A similar process of evolution of matter and life culmunating in the creation of man can be traced from the records of the results of investigations arrived at by the Vedic Ṛṣis preserved in the ancient literature of the Hindus, specially the Vedic literature; and the conclusions at which we have just arrived are strongly supported by them. In Mahābhārata (II. 233 1) we read that "Luminous Brahman is the seed from which single element, this whole two-fold creation, the immovable and the movable, has been produced." A verse in Muṇḍaka Upaniṣad runs thus: 'By energy at work

Universal Brahman extendeth itself, and from Brahman is born matter, and out of matter cometh life and mind and truth and the worlds and it works immortality'.

'In the beginning', the Veda says (X. 129.1), 'the non-existent was not, the existent was not, then Prithivī was not, nor the Parama Vyoma of Brahma. How could there be any dwelling place, and where? Of what felicity (i. e. of whom or of what living being could enjoyment or fruition whether of pain or pleasure, be predicated, there being no life)? The deep unfathomable water there was not'. Then—'Death was not, nor at that period life (amṛtam); there was no distinction between day and night. That one unbreathed-upon breathed of his own strength; other than that there was nothing else whatever' (X. 129.2). Next we find, "there was darkness covered by darkness in the beginning; then out of all the ocean of inconscience, when all was covered with emptiness, it is that one spiritual existent who is born by the greatness of his own energy" (X. 129.3). Then the Universal Brahman extended itself and creation began. "To create the existent beings out of the Non-existent, the seeds (i. e. the developing ground-plan out of which have been evolved all other things) were created" (X. 129.4). "Their ray (then) was stretched (on all sides) across, below and above, which resulted in the creation of all living beings [the shedders of seeds] and the great worlds" (X. 129.5). The order in which the living beings have been created is also distinctly stated in the Veda (X. 72). From the earth the upward growing trees were born, then the lower forms of animals, and then the Devas, the ancient forefathers of the human race (X. 72,4).

Now in its actual process of evolution, the Universe or rather the Universal Brahman, has had to pass through several distinct stages. During the first stage the one spiritual existent extendeth itself, and the ray of his seed was stretched on all sides, resulting in the creation of ether whose quality is sound. Then out of ether was evolved wind. In the third stage fire proceeded from the mutual combination of ether and wind. At this stage the whole system was only 'a fluid haze of light'. Now when the earth gradually cooled down, the oceans were formed, and owing to the greater density of vapour-laden atmosphere, 'there was darkness over the face of the globe.' Lastly out of water was produced earth. Then out of this Universe of Matter in which there is an obscure omnipresent life, 'activised by that life a secret sleeping mind, sheltered in that sleep of mind an involved all-knowing all-originating spirit, was gradually and slowly evoked life, then mind and last of all a diviner intelligence.' Such, in short, has been the process of evolution according to ancient Hindu thinkers. "The physical history of mankind," writes Sree Aurobindo Ghosh in his essay on 'The Ascending Unity', (p. 698, Vol V, June, 1918, Ārya), "is the growth out of the sub-vital and the animal life into the greater power of manhood; our inner history as indicated by our present nature, which is the animal plus something that exceeds it, must have been a simultaneous companion growing on the same curve into the soul of humanity, the ancient Indian idea which refused to separate nature of man from the Universal Nature, or self of man from one common self, accepted this consequence of its seeing. Thus the Tantra assigns eighty millions of plant and animal lives as the sum of the preparation for a human birth." Again, "The animal prepares and imperfectly prefigures man and is itself prepared in the plant as that too is foreseen obscurely by all that precedes it in the terrestrial expansion" (p. 697,I bid). Thus we see that the successive development proposed by the ancient Ṛṣis is that the lower forms of being come first, and man afterwords as the crown of spirits' development of life on earth.

## II

Soon after the earth had cooled down, so that the oceans were formed, the gradual shaping of the great continents began. In the Veda we find mention of four countries, Dyau, Prithivī, Antarikṣa and Div. From a line of the Taittirīya Brāhmaṇa* we learn that in the beginning of this stage there was no country, neither Dyau, nor Prithivī, nor Antarikṣa, nor Div. Now which country, according to the Veda, was the first to emerge from the ocean? Which is the oldest life-producing country in the whole world? Which is that land on which the work of creation, the work of evolution of animal life, continued without any interruption? In the words of a Vedic bard, 'What was that embryo which the waters first retained in its womb, which is better than Div, better than this Prithivi, whose greatness is even acknowledged by the Devas and Asuras, and where the Devas first beheld this world' (X. 82.5.)†? The author, then, goes on to say that

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* Idaṃ vai agre naiva kiñcana āsīt na dyaurāsîn na prthivî na antarikṣam. Tai, Br, p. 419 Bombay Ed.

So also in Ṛgveda (X. 129. 1):

Nāsadāsîn no sadāsît tadānîṃ Nāsîdrajo no vyomā paro yat kimāvarîvah kuha kasya śarmann ambhah kimāsît gahanaṃ gabhîraṃ i. e. the Non-existent was not, the existent was not, the worlds were not, nor was that which is better thān Vyoma. How could there be any dwelling place (śarman)? where? of what felicity? How could there be the deep unfathomale water?

†X. 82. 5.

Paro divā para enā pṛthivyā
Paro devebhirasurair yadasti,
Kaṃ svid garbhaṃ prathamaṃ dadhra āpah
Yatra devā samapaśyanta viśve.

'the waters verily first retained the embryo in which all the Devas (i. e. men) were aggregated i. e. generated. Sāyaṇa interprets this 'embryo' as *aṇḍam*, and Mahīdhara as *bījam* or seed. Both of them derive their notions from Manu. Unfortunately the interpretation offered by them both is wholly unsatisfactory. Had both the commentators read both these *Ṛks* with the first *Ṛk* of the same Sūkta, they would have discovered the real truth. Here the Vedic Ṛṣi is referring to the country which first emerged from the depth of the waters and where the Devas (i. e. men) originated.

In *Ṛk* X. 82.1*., we read: 'The maker of the senses, resolute in mind, engendered the waters, and *then Dyau and Prithivī floating* (on the waters).' I beg to draw the attention of the reader to the word "floating"*. In this *Ṛk*, where it has been definitely mentioned that after the Oceans were formed, the two dwelling places referred to in *Ṛk* X 29.1, Dyau and Prithivī gradually emerged from the depth of the water None of the Vedic scholars have taken the trouble of interpreting the signification of this verse. As all of them started their enquiry with the idea that Dyau is 'sky' and Prithivī is the 'earth', they thought it quite unnecessary to pause here and enquire about the real meaning of the verse. The meaning of this *Ṛk* can only be understood, when it is read in the light of the results of modern geological investigations. Rightly interpreted this would mean that soon after the earth had cooled down, the oceans were formed; and then gradually the two countries of 'Dyau' and 'Prithivī' emerged from the depth of the waters. There are many other *Ṛks* which go to support our interpretation that Dyau and Prithivī are two countries situated on the surface of this globe. Thus we read in Ṛk* VI. 70.4, 'Dyau and Prithivī, *you are surrounded by water.*"

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*X.82.1 Cakṣuṣah pitā manasā hi dhīro ghṛtām ene ajanan namna māne Yaded antā adadṛhanta pūrva âdid dyāvāpṛthivī aprathetām.

I would like to draw the attention of the reader to the following Ṛks:

'Radiant Dyau and Prithivî, *the asylums of created beings*, you are spacious, manifold, water-yielding, lovely, etc.

( VI. 70. 1. ).

'*Firm-set* Dyau and Prithivî, invigorated by your operation, *many beings of various forms* ( i.e. different species of animals ), but similar functions, *are engendered.*

( VI. 70. 3.).

'Footless and motionless, thus ( Dyau and Prithivī ) sustain numerous moving and footed races, as a son is even ( nursed ) on the lap of his parents.

(I. 185. 2.)

" May father ( Pitā ) Dyau, may mother (Mātā) Prithivî, who are all-knowing, and doers of noble deeds, grant us sustenance: may Dyau and Prithivî, mutually co-operating and promoting the happiness of all, bestow upon us posterity, food and riches."

( VI. 70. 6.).†

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* Cf. with Ṛk, vi. 70. 4 "Prithivī, you are surrounded by water", the following statements of the Mahābhārata,—

"He (Duṣmanta, a Vedic king) was the protector of 'Prithivī' bounded by the four seas. He was also the lord of various countries in the midst of the sea" (Ādi Parva, LXVIII, 3-4, M. N. Dutta's Translation).

"This lotus-eyed king (grandson of Puru, son of Yayāti, a Ṛgvedic King) had his sovereignty over the whole 'Prithivī bounded by the four seas" (Ādi Parva, XCIV., 6, Ibid).

† 'Dyau is our Pitā, our birth place ( Janitā ), and it is the birth-place of near kith and kin' ( I. 164. 33).

" Rodasī devaputre pratne mātarā, i.e. Dyau and Prithivî whose sons are the Devas, and which are the ancient parents or birth-places of all ( mātarā mātarau viśvasya mātarau, Sāyaṇa )."

( VI. 17. 7.).

" Pra pūrvaje pitarā dyāvā pṛthivî, ie. Dyau and Pṛthivî, the parents or birth-places ( fatherlands, pitarā ), which were engendered first or in the beginning of creation ( pūrvaje pūrvam prajāte utpanne sṛṣtyādau utpanne, Sāyaṇa ) ( VII. 53. 2)

" Attended by a concourse ( of priests ) I worship the adorable and mighty Dyau and Pṛthivī with sacrifices and praises, those two great ones of whom the Devas are the sons."

( VII. 53. 2).

To the Vedic scholars the country of Dyau is not a real country, but an imaginary place situated high up in the sky. Some modern scholars interpret 'Dyau' to mean 'the sky'. "The poets, the thinkers, and contemplatives of all nations have been attracted to what lay beyond the experience and testimony of their material senses, and have conceived the Universe as divided into several worlds, visible and invisible". "Obviously", continues the writer of' Vedic India',' 'the oldest of such speculations, the starting point for all subsequent ones, is the conception of the two worlds, Heaven and Earth. Many names are given to each in the Ṛg-Veda, but in their special connection as a divine couple, who between them and by their union have given life to all creatures and are ever supplying them with the means of preserving that life, they are addressed, jointly and inseparably, as Dyaus and Prithivī" (p. 136). Here the word, Dyau, has been taken to mean the sky, and Prithivī the earth. Although Professor Ragozin is right in observing that 'Dyau and Prithivī have given life to all creatures and are ever supplying them with the means of preserving that life'—although in a sense quite different from that meant by him—, I can not accept his theory.

With due reverence to the Vedic scholars, mediaeval as well as modern, I after a careful study of the *Ṛks* given above and many others, am compelled to reject the wrong idea that Dyau is the sky and Pṛthivī of the Veda means the earth. Dyau and Pṛthivī, which have in clear terms been spoken of as emerging from the depth of the waters (X 82. 1), which were surrounded by water (VI. 70. 4), which have, in the Ṛg-Veda, been regarded as the asylums of created beings (VI. 70. 1), and of numerous moving and footed races (I. 185. 2), where many beings of various forms (i.e. different species of animals) have been engendered (VI. 70. 3,) which were regarded by the ancient Ṛṣis 7. 7., as their mother-lands, cannot but (VI. 70. 6., VI. 1 VII. 53 2., VIII. 53. 1) be the names of two countries situated on the surface of this globe. Moreover, these eulogies on Pṛthivī and Dyau remind us of the well-known Bengali song which has now become the Indian national song and is sung throughout the length and breadth of the country—

Bande mātaram

Sujalāṃ suphalāṃ malayajaśitalāṃ,

Suhāsinīṃ, sumadhurabhāṣiṇīṃ, sukhadāṃ varadāṃ mātaram

We have already seen that Dyau was, by our ancient forefathers, regarded as Pitā or father (father-land) and Pṛthivī as Mātā or mother (mother-land), VI. 70. 6; and we have also observed that in some places both Dyau and Pṛthivī were addressed as *mātarā*, and in some places as *pitarā*. The epithet 'devaputre' (having Devas as their sons) to both Dyau and Pṛthivī also goes to prove that the Devas, our ancient forefathers, were born in either of these two countries. It is therefore, not surprising that after the re-assertion of religious and political supremacy of the Devas and the final establishment of peace throughout the two countries on the complete destruction of the power of the Asuras, memorable verses were composed eulogising the greatness and prowess of the two lovely countries of Dyau and Pṛthivī, and the great heroes who did so much to free their countries from the oppressions of the Asuras.

From what we have said before we learn (1) that Dyau and Pṛthivī are the names of two countries situated on the surface of this globe, (2) that they were inhabited by the ancient Aryans, who wrote the Ṛgveda, (3) that Dyau was known as Pitā, i.e. fatherland and Pṛthivī as Mātā, or motherland, and lastly (4) that these two countries were the first to emerge from the depth of the ocean. Now the question is, as a Vedic bard puts it, 'which of these two is prior, which posterior (I. 185. 1)'; and which is the first life-producing country in the world ? And lastly, with which countries on the surface of this globe are these to be identified ?

As regards the priority, the Ṛgveda says, "Of the countries Pitā (Dyau) is the oldest [Pitā eṣāṃ pratnah, IX. 73, 3]. In Ṛk X. 82, 5,, we find that the embryo which the waters first retained in the womb, and where the Devas first beheld this universe, has been regarded as better than Pṛthivī. We have also seen that Dyau and Pṛthivī were engendered first. Hence it was the country of Dyau which the waters first retained in the womb, i.e. it was the first to emerge from the depth of the ocean. In many verses of the Ṛgveda Dyau has been regarded as the 'Pitā' or 'Janitā' (I. 164. 33, IV.I.10, VI. 70. 6, VII. 53, 2). In the next paper we shall show that Dyau was called by various names, such as Ilā, Vedī, Yajña & Puṣkara ; and we have definite evidence in the Ṛgveda that, fire was first kindled in this country (X. 45. 8., I. 10. 1., X. 1. 6., III. 24. 2).

Agniraṃ abhavad vayobhir yadena dyaurjanayat suretah (X. 45. 8). Agna ilā samidhyase (III. 24. 2). Agnih prathame ilaspade samiddhah (I. 10. 1).

Agnih prithivyā nābhā ilāyāspade jātah (X. 1. 6).

Afterwards it was brought, writes a vedic Ṛṣi (X. 451.1), to this country (the country in which we live) and then to Apsu, i. e. Antarikṣa. We quote below the commentary of Sāyaṇa on this verse: Agnih prathamaṃ pūrvaṃ divo dyulokasya pari uparī jajñe jātah. Dvitīyam asmat asmākaṃ pari upari jajñe. Tṛtīyam apsu antarikṣe. Now, the mention of this event in the Ṛgveda points to the fact that the people who composed the Veda were originally the inhabitants of Dyau, and that it takes us back to the very beginning of human civilisation in the world. We have already noticed that it was the country of Dyau where our ancestors the Devas first beheld this universe. In a later chapter we shall see that all the ancient civilised tribes of men descended from the Deva stock, whose multitudinous descendants have spread over every habitable portion of the earth.

All these facts and evidences lead us to conclude that the country of Dyau was the first to become dry land, that it is the oldest life-producing country in the world, and that it is the same as the Mongolian land mass mentioned in the beginning of the chapter.

# IX.—PUNISHMENTS IN ANCIENT INDIAN SCHOOLS.

### BY G. L. Sinha.

Until recently it was almost universally believed that the only sure means to correct a child of his juvenile misbehaviour and moral delinquency was to subject him to a government of repression, thwarting and castigation. People indoctrinated with such a kind of belief made the school discipline approximate the condition of criminal discipline. Good-conduct and good-breeding came to mean immobility, moroseness and timidity; and school-rooms became the scene of constant flogging, coercion, threats and reproofs[1].

Even in India before the inauguration of the public schools when the parents had to depend for the education of their children upon private 'muktabs' run by Molvis, the same kind of affairs prevailed. Even the slightest moral misdemeanour and breach of rules, be it due to the child's unfailing curiosity and activity which he could not suppress without undergoing much nervous irritation and serious deprivation, or to his inability to understand and appreciate the truth and the importance of the moral exhortations of his teacher, was to meet a heavy reprimand and outburst of anger. The teacher being ignorant of the science of pedagogy, which we have the privilege to possess these days, used most unnatural methods in teaching as well. He demanded interest and attention where it was not possible to secure them. He taught what the child could not understand and assimilate. He gave task which he could never finish. And all this resulted ultimately in producing a sentiment of hatred both for him and for what he taught.

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[1] The great schools of England—Howard Stauton.
Education. —Spencer, Chaptor III.

Such a state of affairs originated from the influence of the doctrine of the natural depravity of the child's nature. It was believed that the natural tendencies and the spontaneous activity of the child were in consequence of the barbarious and the semi-barbarious habits of the primitive man mirrored in the progeny under the force of the law of inheritance, and there was, therefore, to be made every effort to suppress and check them and to develope in their place fresh habits of good conduct and good behaviour.

Rousseau for the first time revolted against the tyranny and the inhuman methods of the teachers of his age and his indignation grew to such an extent that he went to the other extreme. He preached his Natural Education which dispensed with all authority and supervision and put the child under the guidance and control of nature alone both for moral rectitude as well as for mental development. Teaching was to be made pleasant and agreeable, and love for the child and sympathy with his instincts and tendencies was to form the first principle of every teacher.

Spencer and Madam Montessorii, the great Italian psyclologist, have both made a special study of this truth. With the former it has resulted in the doctrine of 'Discipline by Consequences'[1] and with the latter 'Independence and Liberty'[2] both in action as well as in the choice of the objects of study are the two principles which should determine all education at least in the early years of the life of the child.

As a natural consequence of two extreme views, one of imposition and the other of freedom, each standing in opposition to the other, there has grown a controversy regarding the position of punishment in education. Although complete unanimity of views has not been reached, it is commonly believed that, while much of it must stop and the process of education should be made as much agreeable and pleasant as possible, there are cases in which its efficacy as the only corrective influence for the check of an evil conduct cannot be ignored and overlooked. While love and sympathy do a great deal in evoking the higher nature of man, it is equally true that the fear of punishment has also been a very patent factor in making a man abstain from what is evil and take what is good[1].

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[1] Education.—Spencer, Chapter III.

[2] The Montessori, (Maria Montessorii) method—chapter V.

But punishment produces its desired effect only under certain conditions. It should be effected on the principle of justice and should on no account be tempered with personal caprice and prejudice. It should be inflicted when there is a need for it and an actual offence has been committed. Then, it should be proportional to the offence. An ordinary breach of rules is usually corrected by light punishment or even by words that appeal to sense of honour, but if there has occured a misconduct that amounts to serious moral guilt which is likely to affect the tone and the reputation of the institution a serious punishment is of absloute necessity.

There are a few more points which we are to note in this connection. A child should be punished for doing wrong only when there is a conviction that the obliteration was deliberate and out of carelessness. But if a fault has been committed because of the ignorance of the evil consequences of it, or due to certain physical inability as we find when a boy is unable to take down in his note book correctly what is written on the black-board because of bad vision, or what he is told because of bad hearing; or due to the mistake of the parents which is so often the cause of late-coming, improper dress and the like ; or due to momentary forgetfulness or accidental mistakes, certainly the punishment should be of entirely different nature.[1]

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[1] Instruction in Indian Secondary Schools, A. H. Mackenzie, chapter I.
Child mind, Dunville, chapter VI.
The Theory of Good and Evil, Rashdall, chapter IX.

What punishments should we have recourse to is the problem which is to be considered next. Here we find the following recommendations :—

1. Punishment of consequences—If a child makes a mistake he should be made to bear the consequences of it.
2. Moral punishment—This includes the withdrawal of the good opinion of the teacher and of the boys, losing grades and position in the class, cessation, temporary or permanent, of the privileges which other students enjoy, notification of the guilt, public apology etc.
3. Reproofs, admonitions and threats.
4. Fines—which are desirable only when the fault is due to the mistakes of the parents.
5. Detention after the school hours.
6. Corporal punishment—here we are advised to exercise great care. Entire abolition is the ideal to be aimed at. It is to be brought into operation where there is left no other way to check the evil.
7. Expulsion—This is to be used when the boy by his repeated crimes has proved himself dangerous to other students.

Let me now invite your attention to the views of the ancient Indian teacher regarding the problem. Manu in the beginning of the second chapter of his Dharma Śāstra, which is specially meant for the teacher and his pupils, made it clear in a period as early as the dawn of Creation itself if we accept the scriptural authorities as authentic and genuine, that the only natural and therefore the only right method of education, both for intellectual and moral, was one which depended upon the principles of love and sympathy for the child and which was associated with affection and kindness in behaviour as well as in speech. Never was teaching (at least in so far as it pertained to the teaching of children) to be accompanied by a feeling of pain, either physical or moral; and it was enjoined upon the teacher to restrain his organs of sense to an extent which will admit of no improper utterance or sourness of temperament. Demoralisation of character such as the growth of vanity and pride on the part of the teacher affected the soft and the delicate heart of the child, and what was still worse it rebounded upon the man himself with a greater force and paved the path of his destruction and ruin. Thus says Manu, 'Teaching for good is to be effected without injury to creatures (pupils); and by one desiring of his duty, also, sweet low speech should be used[1]'.

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[1] Psychology in School Room, Dexter and Garlick, chapter xxiv.

'For though despised, one sleeps with comfort, with comfort awakes, with comfort goes about in this world; (but) the scouer perishes.'[2]

The purpose of education being to provide the mental equipment and the principles of character necessary to self-devolopment of the individual so that the laws of life were accepted with courage and the opportunities of living enjoyed in the right manner, discipline and self restraint became the foundation of all teaching. But while it being so, it was definitely known that there was a period in the life of man which was best utilised through freedom and liberty, and any imposition or restriction was eventually to result in damping off that natural dynamic power which we call desires and which alone have ever been the basis of all worldly greatness and the achievements of the human intellect. That period was the period of childhood. Thus says Markandeya Purana :—

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[1] Manu— Ch. II, 159.

[2] ,, ,, 163.

'And so long indeed as a dvija is not invested with the sacred-thread, so long, my sons, he acts, speaks and eats unrestrainedly.'[1]

Childhood has ever been thought of with highest esteem by the Hindoos. Our scriptures and also the traditional beliefs will bear full testimoney to it. All children irrespective of their birth and parentage were considered equal. Each one of them was the purest form of humanity. Their uncontaminated nature was understood as the manifestation of the Divine element of man, and the Divinity that shone forth from within was to receive its due sanctity and love from the all-and ever-worshiping mind of a religious race. The love and affection which the citizen of Ajodhya showed towards Rāma, or the purest devotion with which the cowherds of the Nanda clan met Krisṇa, and the attribution of God-like qualities to them in the period of their childhood, may be taken as an example of a general principle. The reverence and love of a diety was made due to the child also. He was thought to possess infinite potentialities. His actions were the actions of Nature and to check them or thwart them was a sin. Nothing improper or unholy was to be said or done in his presence. His house and the environment was to be kept neat and pure. He was to be dressed with the best clothes and fed with the best food. Relations and friends were to offer presents and cheer and please them with their fondlings and kissings.[2]

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[1] Mārkaṇḍeya Purāṇa, chapter xxviii.

[2] 'Just as a child becomes docile through feeding and caressing'............Śukranīti, chapter III, 527.

But this stage of life was not to last long. With the growth of consciousness, the Ego which was first dormant began to unfold itself with a much greater force. The sensuous elements too became effective and powerful. The original pure nature was thus marked and usurped by the attributes of the body and the senses.[1] There thus grew the necessity of finding out a way, which while making full allowance for these, would at the same time restore the man to his eternal Divine Essence.[2] That way was the path of Dharma. To do one's duty was the ideal to be aimed at. But this had its own difficulties. The moment a man resolved to follow the right path his lower nature was stimulated, and in virtue of the powers inherent in it, it acted upon his higher self and made him go astray.

There was, therefore, felt the necessity of conquering the body and the senses and making them subservient to the will of the soul alone. Restraint and government became thus a powerful factor in the training of man. Punishment became unavoidable instrument to remind him of his original pure nature whenever he forgot what he really was and fell a victim to evil and vice. It aroused his moral conscience and compelled him to reflect upon the folly of his conduct, and make determinations for future in the path of righteousness. Thus about punishment says Kautilya:—

Hence the King shall never allow people to swerve from their duties; for whoever upholds his own duty, ever true to the customs of Aryans, will surely be happy both here and hereafter. For the world, when maintained in accordance with the injunctions of the triple Vedas, will surely progress, but never perish'.[3]

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[1] Śukranīti, chapter I, 181-226.
[2] Manu, chapter II, 4-5.
Matsya Purāṇa, chapter ccxii.
[3] Kauṭilya Artha S'āstra, Ch. III.

Thus says Manu:—

For fear of him ( punishment ), all beings immovable and movable, are fit for enjoyment, and wander not from ( their ) law'.[1]

Discipline and government were the two great means to make the child prosper in life. They showed him the right path of acquiring wealth. They enabled him to learn what was taught to him regarding technical and professional studies, and secure excellence in them They made him aware of the great power of the mind and showed how it was to be controlled and utilised. They bestowed steadiness of character and firmness of temperament and taught excellence of foresight, speech and action. Thus says Kautilya:—

That scripture on which the well-being and progress of the sciences of Anvikshaki, the triple Vedas and Vārtā depend is known as Danda (punishment ).'[2]

Punishment was a great power. It was a great correcter and reformer of man. It was the securer of happiness and of all that made life worth living. It maintained the integrity of the society and saved it from disintegration and break-down. It preserved the state and its government. It determined the duty of the world, the demons, the Gods, the living and the non-living. Thus says Manu:

The whole world is mastered by punishment; a pure mind is hard to find: for fear of punishment, indeed all the world is fit for enjoyment.'[3]

'Punishment rules all men; punishment alone protect them; punishment is watchful while they sleep.'[4]

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1. Manu VII, 15.
2. Manu VII, 23.
3. Manu VII, 18.
4. Kauṭilya Artha Śāstra, Ch. IV.

Thus says Kautilya:—

It is upon the science of government that the course of the world depends'.[1]

But it had its limitations and it operated and produced its desired effect only under certain conditions. A constant use of it such as would come off any moment and every moment, was to result in rebellion and revolt. On the other hand cessation of it ended in idleness aad corruption. Inflicted out of vindictiveness, malice or personal prejudice, it excited resentment and anger even in the best men. But if awarded on the principle of justice it excited love and respect. Thus says Kautilya :—

'For whoever imposes severe punishment becomes repulsive to the people, while he who awards mild punishment becomes contemptible. Whoever imposes punishment as deserved becomes respectable...while punishment, when ill awarded under the influence of greed and anger or owing to ignorance, excites fury even among hermits and ascetics dwelling in forests, not to speak of householders.'[2]

For the right application of it, highest tact and experience was necessary. It was to involve the principle of justice. It meant that it had reference to the actual situation and did not come into operation unless and until an actual offence had been committed. It meant that there was a violation of certain law, and justice demanded, that, that viloation was to be punished. Then it was to vary with circumstances and with the nature of the offence. A fault committed out of ignorance or accidental forgetfulness was to meet a punishment different from what would be applied to one committed knowingly and deliberately. A small offence was to be dealt

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1. Kauṭilya Artha Śāstra, Ch. IV.
2. " " " " "

with a light punishment and a severe one with a severe punishment. The obliteration of a rule done for the first time was less severe than one repeatedly done. Thus we find :—

> Inflicted properly after consideration (punishment) delights all people ; but inflicted without consideration italtogether destroys them.[1]
>
> 'Having truly considered him (Punishment as well as) place and time and (his) power and knowledge, (the) (king) should suitably punish evil doing'[2]. 'The unrighteous punishment destroys the heaven, the glory and the worlds of the king. But the proper punishment procures him victory, glory and heaven'[3].

Such was the philosophy of the Science of punishment of the ancient Hindus.

Let us now investigate the problem with reference to the application of these principles in the education of the children of that age. Kauṭilya lays great stress upon the punishment of consequences and considers it as the most effective means of correcting bad conduct and moral faults. Thus while considering the case of the princes who were led astray under the temptation of youth he says :—

> 'When under the temptation of youth he turns his eyes towards women, impure women, impure women under the disguise of Aryas shall at night and in the lonely places terrify him ; when fond of liquor, he shall be terrified by making him drink such liquor as is adulterated with norcotics ; when fond of gambling, he

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1. Manu VII, 19.
2. Manu VII, 16.
3. Yājñavalkya Smṛti, XIII. CCCLVII.
   See also Matsya Purāṇa, Chapter CCXXV.

> shall be terrified by spies under the disguise of fraudulent persons; when fond of hunting he shall be terrified by spies under the guise of highway robbers.'[1]

But if the evil were of grave nature and the habit deep-rooted so that the offender was a source of danger to the society, isolation was the punishment that was recommended. In case of the sons of the kings who were of evil disposition and whom discipline and instruction could not correct, we find that they were to be kept under guard and their movements were carefully watched; and the story of Prahlāda[2] as given in Viṣṇu Purāṇa will bear testimoney to it. The other form in which this punishment was effected was the social boycott in which case the culprit was made to leave the society and live outside for sometime, the period of banishment being determined by the degree of the seriousness of the offence committed. Thus says Matsya Purāṇa :—

> 'A fallen person should be taken oudside the village limits by his brethern........The friends of the fallen should not address him or sit with him or travel with him.'[3]
>
> One who is guilty of illicit connection with his preceptor's wife should observe the ordinance prescribed for the sin of committing adultery with a lady of one's own community.[4] (He must perform the Prājāpatya penance for a year, according to the rules of the Mahāvrata, clad in a garment of bark, and living in a forest.)[5]

Āpastamba recommends only the milder kinds of punishments and considers it sufficiently effective for all sorts of

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1. Kauṭilya Artha Śāstra, Ch. XVII.
2. Viṣṇu Purāṇa Ch. XVI.
3. Matsya Purāṇa Ch. CCXXVII.
4. ,, ,, ,, ,,
5. Viṣṇu Smṛti Ch. LIII., 1—2.

offences. According to him reproofs were usually sufficient for small obliterations, but in cases where this did not prove enough he suggests other methods also. The boy was to be frightened and made to starve. Then he was to be treated with cold water and lastly he was to be expelled. Thus we find :—

> 'If the pupil commits faults, (the teacher) should always reprove him.' [1]
>
> 'Frightening, fasting, bathing in (cold) water, and banishment from the teacher's presence are the punishments (which are to be employed) according to the greatness (of the faults) until the pupils leave off (sinning).' [2]

In addition to the unique method of punishing a pupil, by starvation and application of cold water, we come across for the first time with the punishment of expulsion from the class. There is no mention, however, anywhere whether the boy thus punished was to stay with the teacher or was sent back to the parents, but one thing is clear and that is that the punishment lasted only so long as the evil habit continued and the moment he was able to reform himself he was accepted and taken in the class.

This view is supported by another authority also. Śukrāchārya recommends a similar treatment for a child who turned refractory and rebelled against the authority of his parents and the teacher. But he warns at the same time that such a punishment should not continue long, lest he should meditate upon taking revenge and prove a dangerous foe. Thus we find :—

The child who has had ways of living should not be forsaken. If oppressed, he destroys his father by having resort to enemies.[3]

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1. Āpastamba 1, 2, 8, 29.
2. ,, 1, 2, 8, 30.
3. Śukranîti 51—52.

The punishment of admonitions and reproofs finds a fuller treatment in the Smṛti of Bṛhaspati, and the commandments given in that connection are worthy of our consideration. The learned Rishi agrees with the views of Āpastamba and says that all punishment should begin by admonitions, and other measures should be adopted and made use of only when it is ascertained that it has failed to produce any effect. He mentions, although indirectly, that the usefulness of this punishment depends upon the degree of sensitiveness of the moral feeling of sense of honour due to high educational qualifications and talents, or due to high birth and parentage, and social position. For a finely tempered nature a word or look was sufficient to bring a man to his senses and produce reaction and hatred for an evil conduct, which no amount of punishment could produce in a dull and morbid sentiment. But if the moral feeling had become callous and stood in defiance to the sense of honour and self-respect, harder punishment became necessary. Thus he says :—

'When he has discovered a man to be an offender, (the King) should inflict on him (gentle) admonitions, (harsh) reproofs, or corporal punishment, or one of the four gradations of fines.'[1]

'The King should punish elders, domestic priests, and persons commanding respect, with (gentle) admonitions only; other litigants he should awer in a fine, when they are found to be guilty; and on the perpetrators of a heavy crime he should inflict corporal punishment.'[2]

While Apastamba makes no mention of corporal punishment or of any other strong repressive measures he is sufficiently strict in penance and purificatory rites. In fact

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1. Bṛhaspati Smṛti XXVII. (Miscellaneous) 4.
2. " " " " 7.

this formed a special kind of punishment by itself and almost all the Smriti writers have devoted a chapter on it. Space does not allow a detailed discussion of them or to make a scientific exposition of the valuable principles that lie behind them, although such an attempt will be very profitable for the modern teacher who does not recognise their merits ; and it would suffice to mention here that it was a process of eradicating an evil disposition by bitting at the very root of it. It was known that the body, the senses and the mind were responsible for all the sins of man, while the Atman that sat within ever enjoyed its eternal pure nature. A system of muscles and nerves weakened through disease or improper living, a combination of senses which become a slave to greed, avarice and anger instead of becoming a master of them and a mind devoid of the strength of will and concentration, could not but lead a man to what was sinful and unrighteous. And hence if any permanent remedy for moral rectitude were ever aimed at, it was to be sought in them alone.

The cause of the disease being known, the remedy was not difficult to find. First, the body was to be given a particular kind of food. There werecertain things which were allowed, while there were others which were forbidden. The importance of this was very great. Chandoga upanishad makes the condition of the mind depend upon the solid and the liquid nourishment supplied to the body. One's desires, likings and dislikings all depended upon the nature of the material that he took as food. [1] Then the evil predilections and tendencies already weakened and enfeebled by physiological treatment were to be subjected to a further process of eradications through noble determinations [2], and by present-

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1. The food being pure, the mind becomes pure, the mind being pure there results steady remembrance, Chh. Vp. VII, 26.

2. This self cannot be obtained by one lacking in strength, nor by one who is heedless, nor by unillumined penance, Mu. Vp. III, 2.4.

ing an environment alien to their growth and progress.[1] And lastly the mind the most important of all was to be subjugated and brought round by strengthening the will and devoloping the power of concentration and voluntary attention.[2]

Penance was thus a scientific method of treating a man for his moral weaknesses. It was a process of awakening and energising the 'inner man' by curing the morbid and devitalised 'outer man'. And when this was combined with the knowledge of the self; and glory of the Atman was sung to him, he emerged out of the darkness and ignorance which he himself had brought upon him, and he walked in the world as the upholder and preacher of what was right and true alone.[3]

Let us now pass on to other kinds of punishments. Matsya Purana makes a reference that a fine was to be imposed upon the students who read at the forbidden times. It imposes a fine on those also who used harsh words towards the teacher. Thus we find :—

> A pupil who reads at forbidden times should be made to pay a fine of 3 Kahanas......One who uses harsh words towards his preceptor, mother, father......does not make room for his preceptor should be fined 100 paṇas.[4]

The smritis do not make a mention of this punishment and it is only here that we find a trace of it. This may be taken to be suggestive of an important fact. It indicates that in the period when the Puranas were composed, the old system of education under which the pupils lived at the house of the teacher and maintained themselves by begging was not much in practice and the pupils stayed with their parents and went to the teacher only in the hours of study. No one could expect a boy having almost nothing which he could call his own, and depending for his meals upon the charity of the public, and even that to be granted to him with the permission and the approval of his master, to pay a fine in coins. On the other hand such a thing was obviously possible under the other conditions, when the parents were wholly responsible for the moral correction of their sons. A fine imposed upon a child and made payable by his father would certainly serve as good warning to the latter for the neglect of his parental duty and to take a better care in future.

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[1] There is nothing unknown, or inaccessible, or unobtainable, either in heaven or here, to strennous men who have brought their mind, organs and soul under control. Mārkaṇḍeya Purāṇa. XX, 37.

[2] 'Their modifications are destroyed by meditation'.
Patañjali Yoga, Chapter II, 11.

[3] See Chapter on Penance—Āpastamba.

[4] Matsya Purāṇas, Chapter CCXXVI.

Lastly I would invite your attention to the problem of corporal punishment which forms a very interesting topic of discussion. It can be said without doubt that it was never considered commendable to have recourse to it either in the intellectual education or moral correction. All the smṛtis make an explicit mention of the fact that it was to be permitted only when it was found that no other method of improvement could be of any avail, and the only possible way to make a culprit leave the evil path and accept what was good, was to subject him to physical pain. Thus we find:—

> 'As a rule a pupil should not be punished corporally[1].' If no other (course) is possible (he may be corrected) with a thin rope or a thin cane.[2]

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[1] Gautama ... ... II, 42.

[2] „ ... ... II, 43.

But here the teacher was warned that he was not to allow the beating to pass into brutality or to carry it to an extent that would amount to torture or cause serious physical injury. And as a safe-guard against any unhappy consequences that may arise there-from, it was made clear to him that the only instrument that he could use for the purpose, was a cane or thin rope ; and if he used any other, his conduct became punishable by law. Thus we find :—

> 'If the teacher strikes him with any other instrument he shall be punished by the king.'[1]

Narada Smriti although not making any direct reference does mention at one place that the children were not to be subjected to any such punishment as would cause severe physical strain or injury. Even where justice was demanded they were to meet a treatment separate and different from what was to be awarded to a man, and in respect of physical delicacy and moral sensitiveness they were classified with women. Thus we find :—

> 'Women and children should not be subjected to the ordeal by water by persons acquainted with the law.'[2]

Manu holds the view of Apastamba in prescribing only those instruments of punishment which would cause only superficial injury and would do no harm to the bones or the internal organs. In fact this he makes a condition, not only in the case of the students but in the case of others also for whom corporal punishment became a measure of necessity. But while making such a recommendation sufficiently worthy of our appreciation, he warns the teacher of his time to note that there were certain parts of the body which were more sensitive than others, and any blow inflicted on those parts was liable to affect the internal organs within and be a source of permanent injury to them. Thus he makes it clear in words which can scarcely be made stronger by even the best of our pedagogical anthropologists who makes the condition of study depend upon the conditions of the body, that the only portion of the body which could be allowed for corporal chastisement was the back, and on no account the places of the nobler organs were to be touched. And with a view to give the sanctity and reverence of religion to his injunction, which it duly deserved in view of the incalculable harm which an inconsiderate and thoughtless teacher was likely to produce, he mentions that one who did not observe this rule was guilty of the crime of having committed a theft. Thus we find :—

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[1] Gautama ... ... II, 44.
[2] Nārada ... ... I. 313.

> 'A son, slave, pupil, own brother should when they have committed a fault, be beaten with a cord or a bamboo cane.'[1]
>
> 'But on the back of the body (only), never on a noble part ; if one should smite them on any other part than that, he should incur the sin of a thief.'[2]

Such were the views of our ancients regarding school punishments.

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1. Manu ... ... VIII. 299.
2. Manu ... ... VIII. 300.

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